# For Reference

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### THE UNIVERSITY OF ALBERTA

### THE DEVELOPMENT OF THE CONCEPT OF TRANSCENDENTAL

by

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### A THESIS

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### ABSTRACT

No one would deny that our present store of knowledge arose as a direct result of the efforts of those thinkers and inventors who preceded us through the millenia. This is something that we should bear in mind especially within the discipline of philosophy, as philosophers seek to answer the same sort, if not the same questions asked by their intellectual ancestors since the first glimmerings of organized questioning thousands of years in the past. Not enough attention is paid to the accomplishments of those past thinkers. This thesis is designed to present one example of this lack of attention, and to illustrate how serious it can be.

second purpose of this thesis is much more specific. It defends the position that the contemporary notion "transcendental" is relatively bankrupt - not due to any intellectual poverty of the notion itself, but rather to the restrictive nature of its many contemporary treatments. This thesis shall endeavour to demonstrate this by comparing a number of comtemporary discussions of the concept transcendental with historical attempts at explicating and utilizing the concepts which evolved into what we now group under the 'Transcendentals'. The claim is that our inability to utilize the richness inherent in the concept Transcendental results from our unwillingness to read, understand and take seriously the comments and studies of earlier scholars. This, combined with our bias towards 'scientific'

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explanations (explanations that begin with certain assumptions about the explanatory ability of certain scientific hypotheses) has blinded us to the epistemological value of the observations of our intellectual predecessors on both the Transcendentals and the concept transcendental.

The first chapter examines the development of the concept transcendental from its first appearance to its incorporation in the writings of those philosophers immediately influencing Kant. Beginning with the nous of Anaxagoras, the use of the concepts which were to become the Transcendentals through Plato, Aristotle, the Arab Commentators to the Latin Mediaevals is traced. A number of early uses of the concept transcendental in Alexander of Hales, Bonaventure and Albertus Magnus are examined. The works of St. Thomas Aquinas, Duns Scotus, William of Ockham and Francisco Suarez as they bear on the concept transcendental are noted, as are those of Descartes, Spinoza, Berkeley and Leibniz. The last part of the first chapter is taken up with the incorporation of the term 'transcendental' into the writings of Wolff, Crusius, Lambert and Tetens. This latter portion of the preliminary chapter focuses on the similarity of their use of 'transcendental' with that of Kant.

The second chapter deals with Kant's use of the concept transcendental in the *Critique of Pure Reason*. This chapter argues that: (1) Kant is consistent in his use of the term 'transcendental'; and (2) his use of 'transcendental' must

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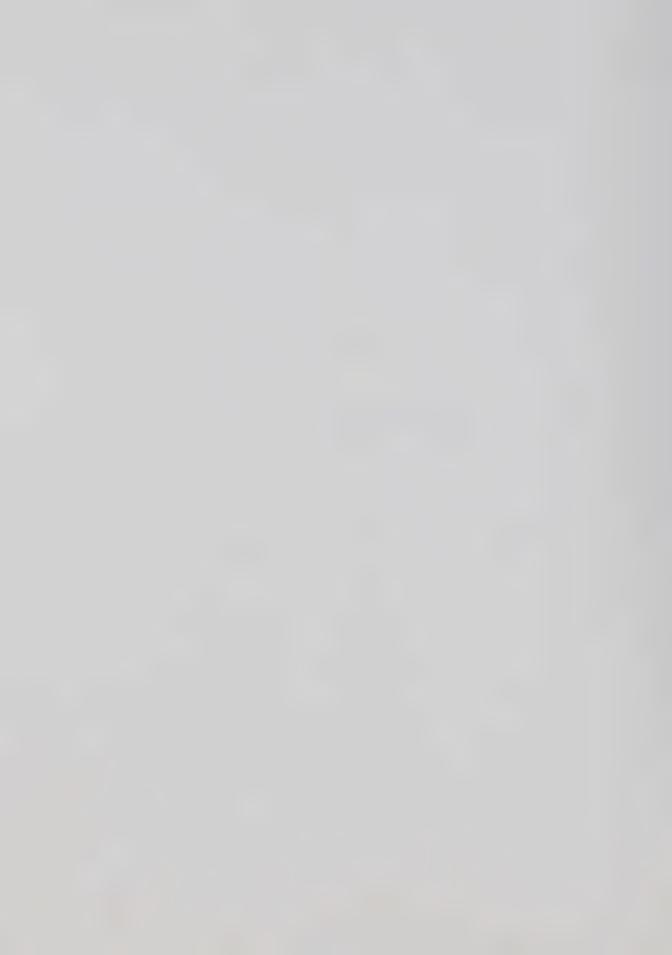
seen as an evolutionary stage in the development of the concept rather than as a revolutionary departure from the tradition. The chapter begins with a historical observation on the use of the concept transcendental immediately prior Kant, and an illustration by Kant as to his own views on his relation to the tradition which suggests an evolutionary reading rather than a revolutionary interpretation. It then presents a Kantian definition of the concept transcendental, catalogues the various uses Kant makes of the term. It next argues that the numerous charges that Kant univocal definition of the concept transcendental are false; rather Kant has a clear, single meaning of the term and consistent in his employment of it. It then shows that Kant must be seen as modifying the use of the concept transcendental, but in an evolutionary rather than in the revolutionary sense as claimed by a number of contemporary writers.

The third and final chapter seeks to compare a number representative contemporary discussions of the concept transcendental with the views and studies of Kant questioning a number tradition. Ιt begins by interpretations of Kant by contemporary scholars, suggesting that their interpretations are colored by analytic biases. The chapter then proceeds to discuss a famous contemporary 'transcendental argument', that of P.F. Strawson in Individuals, as well as Strawson's more general remarks The Bounds of Sense. There follows a brief overview of the

role which the concept transcendental appears to be playing in contemporary discussions in the philosophy of science. The chapter ends with a few short comments on the role of the concept transcendental in contemporary accounts of implication and presupposition.



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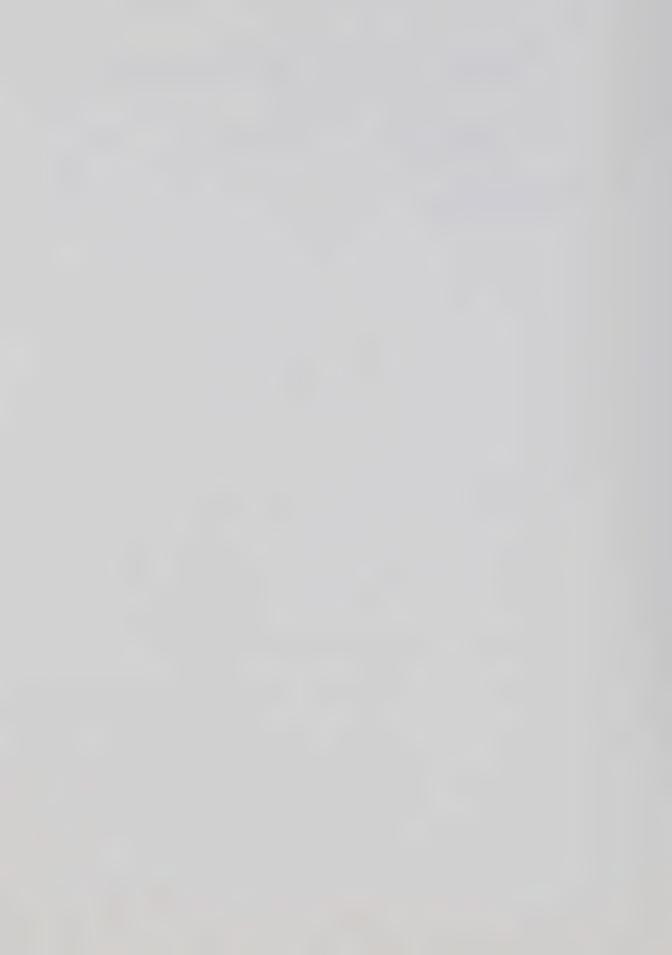


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# I. THE DEVELOPMENT OF THE CONCEPT OF THE TRANSCENDENTALS BEFORE KANT

### A. Plato, Aristotle and the Arabs

The concepts which were later to become the notion of the *Transcendentals* had clear roots in Plato's Middle Dialogues, and is likely treated there partly as a response to comments by earlier Greek Philosophers. There are a number of places where Plato develops the primitive notions which are to become the Transcendentals, primarily in the *Theaetetus, Parmenides*, and the *Sophist*. In these three works the Transcendentals in their primitive form emerge as all-pervasive unchangable Forms predicative of themselves as well as everything else. Plato suggests that the Forms Being, Same, Other, One, Many, and Rest are peculiar in that they are "all-pervading, connecting terms of discourse" 4

Clearly Plato thought that there were predicates which could be proper subjects (*i.e.* of themselves and similar terms), and that they were in some sense univocal. Aristotle appears to have disagreed with Plato on this point however.

<sup>10</sup>ne might reasonably trace, for instance, the notion of a primal unity to the dawn of reason in Ancient Greece, in Thales' attempt to reduce the diversity of the world to one substance, an *arche* or to Anaxagoras' *nous*. The world of Parmenides was a unity, a single unique whole. There was, for the Eliatic, only the One — and being was [the] one.(see W.K.C. Guthrie, II; pp. 30ff).

<sup>&</sup>lt;sup>2</sup>There are other passages, such as **Plato**, *Philebus 17a*, where Socrates argues that being and unity are convertible.

<sup>&</sup>lt;sup>3</sup>Sophist, 253c; Parmenides 129e. <sup>4</sup>Sophist 254ff. See also Charles Bigger, Participation: A Platonic Inquiry, esp. pp128-135.



In the Metaphysics Aristotle argues that the notions singled by Plato as having a special role were in fact equivocal; rather than characterizable as convertible with being, and univocal, they had significance which varied over distinct predicable categories. In fact, Aristotle argues, it makes no sense to talk of a first principle (such as 'one') which is at the same time an attribute of something else (such as 'good'). The Nicomachean Ethics reflects a very similar view to that portrayed in the Metaphysics: here 'Good' is to be understood in categorically different ways, depending on how and in what categorical sense 'Good' is predicated. 6 In spite of comments like these, however, Aristotle saw the need to retain the notion of Being if only a minimal root of substantial and accidental being. Aristotle's dilemma with respect to the status of such notions as Being and unity is understandable, given that he recognizes the apparent need for such first principles the same elements while at time rejecting them as intelligible as univocal terms.8

The Transcendentals first appeared in the Latin Mediaevals in a far more sophisticated form than that found

<sup>&</sup>lt;sup>5</sup>Aristotle, Metaphysics 1087a30ff.

<sup>6</sup> Ibid, 1096a1ff.

<sup>&</sup>lt;sup>7</sup> Ethics, 1003a16ff

<sup>8</sup> Metaphysics, 998a20ff. Michael Loux points out in his article "Aristotle on the Transcendentals" that Aristotle cannot avoid a category-neutral use of Transcendentals, unless he wishes to maintain an unrelated, irreducible list of categories which are independent of each other, which he definitely does not. This is because, argues Loux, Aristotle saw the Transcendentals as universally predicable and therefore unable to be used to differentiate objects.



in the Ancients. As their immediate philosophic sources were not the Romans or the Greeks, but rather the Syrian and later Arab commentators, it would appear reasonable to suggest that it was through the efforts of these commentators that the concept of the Transcendentals approached the form found in the early Latin Mediaevals.9 Indeed, it would appear that the notion and attributes of being were a topic of lively study throughout the Islamic philosophic world. 10 The preoccupation of the Arabs with the notion of the transcendence of Allah, and the intellectual challenge presented them by the new translations of the Greeks into Syrian and Arabic is well documented. 11 D.H. Pouillon, in his discussion of Chancelier Philippe (whom I shall discuss below) demonstrates forcefully that the Transcendentals, though not under that appellation, were discussed by such Islamic notables as Al-Farabi, Al-Gazali, Averroes, and Avicenna. 12

There exists a good article by Jorge Gracia dealing with this subject. ("The Convertibility of Unum and Ens According to Guido Terrena" in Franciscan Studies, (1973). pp.143-170.) Gracia notes that the Arabs (particularly commentators on Aristotle) understood unity and being as related in a unique fashion, as is indicated by a phrase common among them, "idem in subjecto, different ratione" (p.146).

OSee Richard M. Frank, for example (especially pp.8-27 and pp.58-79).

Prantl Geschichte der Logik im Abenlande. [I would like to thank Professor F. P. Van de Pitte for his extremely helpful translations of pertinent sections of both Prantl and Kuhle.]

<sup>12</sup>**D.H. Pouillon**, "Le premier traite des proprietes transcendentales. La *Summa de bono* du Chancelier Philippe.", pp. 45ff.



The tension between Platonic and Aristotelian systems appears to have diminished in Islamic philosophy, due in large extent to the selective use of the texts of the two Philosophers and their intellectual descendents. This 'selective use' in turn seems to have been prompted by the preeminence of the Islamic faith in all matters, as well as by the opinion of Islamic thinkers that Platonism (certainly neo-platonism) and Aristotelianism, although apparently contradictory, were in fact harmonious (once the errors of each system had been expunged). 13 As an illustration, one need only consider a thinker such as Al-Farabi, who epitomizes the belief of many Muslim thinkers of the Middle Ages that Aristotle and Plato were ultimately concordant. 14

# B. Early or Uncertain Uses of the Term Transcendental

The first occurence of the word *Transcendental* is found either in Roland of Cremona where *Res, Ens, Unum,* and *Aliquid* are mentioned as being Transcendental, <sup>15</sup> or in Chancellier Philippe of the University of Paris (ca. 1225). According to

<sup>13</sup> Ueberweg op. cit., page 412ff.

<sup>14</sup> Ibid, pp. 414f.
15 "Nisi esset unum de transcendentibus, scilicet ens, unum, aliquid, res." (Summa theologica., Paris, Mazarine
Manuscript 795, folio 7vb.) [See Prantl, op. cit., (Bds. III,IV) page 245.] In fact, Prantl suggests that psuedo-Thomas, the supposed author of De natura generis might have coined the term Transcendental when he wrote "Sunt autem sex transcendentia, videlicet ens, res, aliquid, unum, verum, bonum, quae re idem sunt, sed ratione distinguuntur." [folio 1vb.] Prantl notes that the date of this work, as well as the identity of the author, is uncertain, and it appears that the author is a contemporary of Duns Scotus. See Prantl, p.245.



Pouillon, Philippe wrote the first extensive treatise that we know of on the Transcendentals, the Summa de bono. Here Philippe discusses unum, verum and bonum as conditions concomitant with being. They are, for Philippe, not universals in the sense that they are abstractions, or that they are to be found in more than one being; they are fundamental notions, clearly seen by Philippe as identical with being in subjecto yet formally different - different in intention, in concept. 16 This is consonant with the views of Aristotle's Arab Commentators 17 and is evidenced on the one hand by the primitiveness of the concept of the Transcendentals which nevertheless had, on the other hand, shown significant development beyond that of the Arabic thinkers. Together with Roland of Cremona and Chancellor Philippe the name William of Auxerre suitably appears. In his Summa Theologica William may well have been the first latin mediaeval to have included Truth and Goodness as Transcendentals. 18 Certainly we must attribute the introduction of

<sup>&</sup>quot;Transcendental" into medieaval thought to these men.

tals in the Summa de bono. In his article he also draws attention to the familiarity of Philippe with the Islamic Philosophers, and that this together with the evident awareness of the Greeks he possessed suggests that it is through translations of the Arabs at this time that the word Transcendental was coined.

<sup>&</sup>lt;sup>17</sup>See note 8, above.

<sup>18</sup> Gracia (op. cit.) quotes from the Summa Theologica of William: "Primo igitur investigandum quid bonum et quid bonitas, et utrum omnia dicantur bona a primo bonitate quae Deus est. Secundo: quae differentia inter bonum esse et esse. Tertio: quae differentia inter bonum et verum. Quarto: de contrarietate boni et mali. Quinto: de bono in genere et malo." (Summa Theologica, Libro III, tractatus 2.)



# C. Alexander of Hales, Bonaventure, Albertus Magnus

The Transcendentals appear in Bonaventure, where the main discussion of is centered in the *De mysterio Trinitatis*. <sup>19</sup> Bonaventure expanded on his teacher, Alexander of Hales, who had already recognized the notions expressed by the Transcendentals as coextensive with being insofar as applied to God. <sup>20</sup> Bonaventure seems to have recognized the Transcendentals as a distinct group, for he notes in the *De Mysterio Trinitatis* that the unity, truth and goodness which characterize God are also to be found in all of creation, just as the principle of the creation permeates that creation. Insofar as Philippe, Alexander, or Bonaventure discuss the Transcendentals, however, it is apparent that they are ontological characteristics; primarily of God, secondarily of creation.

There appears to be only one place in Albertus Magnus'

\*\*Opera where the term 'Transcendental' occurs, but Kuhle argues, contrary to some scholars, that the Transcendentals

<sup>19</sup> Particularly in Q.I, article 1.1, where Bonaventure discusses the *disjunctive* Transcendentals, such as finite and infinite. (*Opera Omnia*, Tome V, pp. 46-47.)
20 See *Summa theologica*, (Quarrachi Edition) volume I, sections 72, 73: "*Unum*, *verum et bonum convertuntur cum ente*."[*S.T.*, *Pt. I*, *inq.1*, *tract. 3*, *qq. 1-3*, *passim*]. (*In Pouillon*, page 44.) In these sections Alexander discusses the Transcendentals, though not by name, as they apply to God, as Divine attributes and as they apply in general. This appears to be basically a repetition of what Chancelier Philippe said on the subject, and differs little from the line taken in the *Summa de bono*. (see *Ralph M. McInerny*, Vol. II, pp. 215ff; W. Windelband, Vol. I, page 344.)



can be understood as having developed from concept of being.

21 The positing of being as primary, and the Transcendentals as explicating its nature is also alluded to in the twenty-eighth question of the first part of the Summa Theologiae<sup>22</sup>

Dicendum, quod ista quatuor: ens, unum, verum, bonum, convertuntur secundum supposita, sed non secundum intentiones nominum, quamvis unumquodque ipsorum induat aliquo modo rationem alterius secundum modum existendi quem habet. Unde etiam unum, verum et bonum, non addunt super ens nisi modos quosdam existendi, qui vel consistunt in negatione vel in effectu consequente.23

Albertus Magnus appears to be aware here that there are terms which do not strictly add anything to the notion of ens, but which are convertible with it. Unum, verum and bonum. These terms are convertible only in the most general sense however and not in a secondary sense, such as when we speak of this or that thing. 24 For Albert the Transcendentals are real, they exist in three senses: (i) they are in the Divine Mind; (ii) they are in all of the beings of creation which flow from the Divine Mind; (iii) they are abstracted by the human mind from the many individual beings

<sup>&</sup>lt;sup>21</sup>Heinrich Kuhle, "Die Lehre Alberts des Grosses von den Transzendentalien." (See esp. p. 135.) The passage in question is "Et hujus causa est, quod bonum dicit intentionem communem, et est de transcendentibus omne genus sicut et ens: ideo ab ente separari non potest." [Summa Theologica, Pars Prima, Questio XXVII, Membrum III.] Opera Omnia(Ed. A. Borgnet), page 278b.

<sup>&</sup>lt;sup>22</sup>See also Armand Maurer, Medieval Philosophy, pp. 156ff. <sup>23</sup> Summa Theologiae, Tractatus 6, Questio 28. [Ed. D. Siedler p. 214]. (The entire question is worth reading.) <sup>24</sup> See also Opera omnia (ed. A. Borgnet) Vol. I, p. 64b [

Liber de praedicabilibus, tract. 4, c.3 ] and Vol. VI, p. 6a [ Metaphysicorum libri tredecim, Lib. I, tract. 1, c. 2].



through thought. 25

# D. Aquinas, Scotus, Ockham, Suarez

The discussion of the Transcendentals by Thomas Aquinas marks a significant development in the understanding of the Transcendentals over the less sophisticated presentations of earlier thinkers. This development is represented by a thorough discussion of the Transcendentals as they apply to being, both uncreated and created, i.e. to being qua being. In De veritate Thomas points out that unum, verum and bonum are consequent upon being; they are predicable of being insofar as being is understood in certain ways: (i)in relation to itself; (ii) in it relation to the intellect; and (iii) in it relation to the aspirations of the soul. The Transcendentals do not distinguish particular beings, they explicate the notion of being in all of manifestations. 26 Nor do the Transcendentals divide being, as do the categories, but rather they are analogical descriptions of being. To the degree that any being is, it possesses the Transcendental characteristics of being. 27

<sup>&</sup>lt;sup>25</sup>There are two senses of Transcendentals to be distinguished here: the ontological (or metaphysical) and the logical. It is important to observe that for Albertus Magnus, as for Philippe, Alexander, or Bonaventure, any sense of logical is one that presupposes the ontological. Truth (in a non-Transcendental sense) is the agreement of ideas in the mind of man with reality (and, par consequence, with the divine ideas).

<sup>26</sup>De Veritate, Q.I., art. 1. Vide also Summa theologica, Prima Pars, Q. 30, art.3 and Q. I., art. 1.

<sup>27</sup> S.T., Ia. 50,3.



sense metaphysical, that is, insofar as they are convertible with being. They are, however, properties of being in the analogical sense: they do not add anything to being, rather they add to the idea of being, to our knowledge of being. 28 For Saint Thomas the Transcendentals were analogical concepts: each had a single res significata, but several modi significandi. 29 For Duns Scotus, the Transcendentals were univocal concepts. 30 Although Thomas held the Transcendentals to be analogical, while Scotus that they were univocal, the conflict is less than it at first might seem. For Scotus the univocity of the Transcendentals is possible only when they are considered as indifferent to their modi significandi, a consideration which does not arise in Saint Thomas' works. In fact, Scotus appears to grant that when the Transcendentals are predicated of infinite or finite being (as opposed to indeterminite being) they are <sup>28</sup> S.T. Ia. 5; Ia.11,3; Ia.16,8. and De veritate 1.1; 21.2; 21.5. 29 For a concise discussion of the doctrine of analogy as it has direct bearing on Thomas' understanding of the Transcendentals, see Ralph McInerny, A History of Western Philosophy, Volume II, pp. 324ff. 30A univocal concept for Scotus was a concept of such a nature that to affirm and deny it simultaneously would

The Transcendentals are, for Saint Thomas, in a first

nature that to affirm and deny it simultaneously would result in a contradiction; a univocal concept had such a singleness of meaning that it could serve as the middle term of a syllogism. (Duns Scotus, Opus Oxoniense; liber I, distinctio 3, questio 2, n. 5.) Scotus makes another point of concern to us here, concerning the relation of predication to metaphysical reality. See also Wolter, The Transcendentals and Their Function In The Metaphysics of Duns Scotus, pp. 14ff and Frederick Copleston A History of Philosophy, [Paperback edition] Volume II (Part 2), pp. 223-240. An extensive treatment of the subject may be found in M.J. Grajewski, The Formal Distinction of Duns Scotus.



predicated analogically.31

Scotus' most concise statement on the nature of the Transcendentals is found in the Opus Oxoniense, and it is also the clearest single statement of his thought concerning the Transcendentals.<sup>32</sup> Here Scotus writes that the Transcendentals are those attributes which are predicated formally of God, and are of two types. The passiones convertibiles are those predicates which in effect are interchangeable simpliciter with being while the passiones disjunctae which as exclusively disjunctive pairs those interchangeable with being. The Transcendentals are those predicates which are indifferent to the mode of being, to being finite or infinite, because they are predicates which are epistemologically prior to any determination of being. 33 Given Scotus' formal distinction, his is not simply a logical or epistemological unity of concept with no metaphysical basis in reality. Rather, Scotus understands the Transcendentals as having their ultimate foundation in reality, for they are univocal predicates which characterize ontological properties of being when being is considered

33 Opus Oxoniense, Liber 1, distinctio 8, quaestio 3, marginal notes 18-19.

<sup>&</sup>lt;sup>3</sup> Quaestiones subtilissimae super libros Metaphysicorum Aristotelis. L.4, q.1, n.12. (See also Wolter, op. cit., pp. 45f.)

<sup>32</sup> For a much more detailed treatment of the Transcendentals in Duns Scotus' philosophy, I refer the reader to Wolter (op. cit.). My exegesis will generally follow that of Wolter concerning the Transcendentals [what Scotus also calls the passiones entis simpliciter convertibiles] in chapter V of his monograph.



indifferent to the way in which it exists. 34

William of Ockham went much further than Scotus in separating logic and ontology, with the result that his world was one of logical relations between ontologically distinct individuals. 35 Scotus' distinctions were grounded in creation, they reflected the extra-mental reality through the use of conceptual distinctions, yet this relation of the mental to the extra-mental was replaced in Ockham's philosophy by the theory of terms, and it is through this theory of ontologically indifferent terms that Ockham discusses the Transcendentals. 36 Given the separation of logic from ontology, and his theory of intentions, Ockham can write that the Transcendentals are those terms which signify through both first and second intentions. 37 Of the Transcendentals, esse is primary, ens, res, unum, verum and bonum are connotative: they are attributes of esse which

<sup>34</sup> See Wolter op. cit. pp. 31-57.

<sup>35</sup> See, for a rather antagonistic but none the less fair and concise treatment of this, McInerny, op. cit., II: pp 374ff. 36 Ockham held that we intuit strict individuals, and that universals are not objects of direct cognition. The intuition of singular existents provides the basis for abstractive knowledge arrived at through judgements of intuitive knowledge. Abstractive knowledge is knowledge of things considered as abstracted from their "this-here-now", their contingent circumstances: it is knowledge that is arrived at through abstraction from the particular existence of singulars. [See Gordon Leff, William of Ockham pp. 7ff.] Abstractive knowledge is thus knowledge not of 'things', but of terms or signs which stand for 'things'. <sup>37</sup> Summa Logicae, Pars Prima, Capitulum 38. See also Capitulum 39. A first intention sign or concept is one that signifies a real thing. It can also be understood as a sign that does not take another sign as its significatum. Signs of the second intention are those which are signs of signs of the first intention (See Leff, pp.128f.)



indirectly signify the same thing as esse.

The result of Ockham's definition of the Transcendentals is that esse (and consequently the other Transcendentals) can be predicated in two ways: it can be predicated in the most universal sense, that is, as a term of the second intention, or predicated of individuals, as a term of the first intention. In the first instance the Transcendentals univocal terms<sup>38</sup>, while in the second thev equivocal. 39 The independence of logic and ontology in Ockham appears to lead him to differ with Scotus, Thomas, and their philosophical predecessors. The differences are as great as they first might seem. A comparison of Scotus and Ockham on equivocation suffices to correct this point. Recall that Scotus allows for the possibility of equivocation when predicating the Transcendentals of particular 'beings', rather than of being indifferent to its mode of existence. In the same vein equivocation occurs for Ockham if the Transcendentals are considered as signs of the first intention rather than of the second intention. What both Scotus and Ockham are pointing out is that we must distinguish between the Transcendentals as indiffernt to the mode of being and the Transcendentals as they are predicated of an individual.

Francisco Suarez saw himself as following in the Thomistic tradition with his discussion of the

<sup>38</sup> S.L., I, 38

<sup>39</sup> Ibid.



Transcendentals. 40 Suarez argues (and I think correctly) for the compatibility of Ockham, Scotus and Thomas on the subject of the Transcendentals, asserting that as for himself, all three held that they are analogical when concerned with *specific* existences but univocal when concerned with reality in its broadest and undifferentiated sense.

### E. Descartes, Spinoza, Berkeley, Leibniz

I have been unable to discover any use of the word 'Transcendental' in Descartes' writings, but he nevertheless serves to illustrate an important development in the *concept* of 'transcendental' during the decades following Suarez. This is not to suggest that were no thinkers who explicitly dealt with the transcendentals, there definitely were. 41 However, there was an increasing tendency to view the Transcendentals as part of the rational order determined by the way we think, rather than primarily as ontological aspects of reality. 42 John Blisterfield provides us with an example of the tendency to see the Transcendentals as not strictly convertible, but rather *interdependent*: the Transcendentals

<sup>4</sup>ºSee Copleston op. cit. Volume III, Part II, pp. 177f; Ueberweg op. cit., Vol. II, p. 452; Caponigri, A History of Western Philosophy, Volume III, p.117.

4¹ See, for instance, Leroy E. Loemker, Struggle For Synthesis, pp. 136ff. Loemker cites Johann H. Alstead as viewing the Transcendentals as arrived at through a "universal natural intuition" in his Encyclopedia [Loemker, page 141], as did Luis Vives and Lord Herbert of Cherbury. See also Loemker in The Philosophy of Leibniz and the Modern World, page 212.

4²Loemker, op. cit., page 143.



in Blisterfield's thought (which appears to have had a strong influence on Liebniz) *imply* each other. 43 In explicit treatments of the Transcendentals during the period framed by Suarez and Descartes we can observe the transformation of the notion of 'Transcendental' from that of ontological predicates to epistemological, or logical, aspects of thought; from terms convertible with being to terms interdependent and descriptive of the way we think about being. This explicit transformation can be dramatized through a brief examination of the implicit use of the Transcendentals in Descartes' thought.

Descartes is explicit concerning the nature of universals:

Similarly number when we consider it abstractly or generally and not in created things, is but a mode of thinking; and the same is true of all that which [in the schools] is named universals.44

In both the *Regulae* and the *Principles* Descartes argues that what the Schoolmen termed universals are similarities in idea among individual things 45 and thus are nothing but a mode or *attribute* of our thinking of things, 46 concurring with Suarez's observations on the Transcendentals. Descartes notes that some ideas are more 'universal' in application than others as for example, 'triangle' compared with

<sup>&</sup>lt;sup>43</sup> Ibid. pp. 144f. <sup>44</sup> Rene Descartes Principles of Philosophy, Principle LVIII. [The Philosophical Works of Descartes. (Ed. by Elizabeth

Haldane and G.R.T. Ross) Volume I, Page 242 ].

45 Principles, I, LIX [HR.I, 242]

<sup>46</sup> For Descartes modes are the same as attributes or qualities. (see *Principles I, LVI.*[ HR I, 241]



'rectangular triangle'.47 Given Descartes' division of ideas by generality of application it is relatively easy to understand the Transcendentals as being the most 'general' category of universals — the group of 'universal universals'. The Transcendentals, as universal universals, necessarily characterize our thought about the world for Descartes. They have become, to some extent, the universal and necessary conditions of *scientific* thought.

Descartes the Transcendentals had a subjective. epistemological import; they were not a statement of the ontological concomitants of being. Even then, however, they were far less explicitly dealt with than they were Mediaevals. This is not to suggest that they were not important to Descartes' thought - they were as important to Descartes as to both Spinoza and Leibniz. 48 In Spinoza. there was a serious attempt to restore the concept of being to that of the Platonic tradition; 49 Spinoza rejected the as ontologically primary, as anything other than phenomena, illusion. In an ontology of a single substance evidently the attributes of being qua being will be Transcendental and co-extensive. 50

Leibniz carries on the transition from the ontological emphasis of the Transcendentals to the recognition of the

<sup>47</sup> Principles I, Principle LIX.[ HR I, 243.]

<sup>48</sup>I am here echoing Loemker, op. cit., pp. 145ff.

<sup>&</sup>lt;sup>49</sup> Ibid, page 148. <sup>50</sup> See Spinoza, The Chief Works of Benedict De Spinoza. Vol. II, pp. 111ff. [Ethics, Part II, Prop. XXXIX.]



epistemological import of these concepts. <sup>51</sup> For Leibniz, as for Berkeley, the Transcendentals were those principles which governed our knowledge of the world, that is, all the sciences. <sup>52</sup> In Leibniz the Transcendentals have a purely logical import and, together with the tendency of Leibniz to use them only with respect to our knowledge of objects rather than of the objects themselves *per se*, they define phenomenal being, not ontological being. Perhaps the clearest expression of this is found in his criterion of truth: rather than demanding that the idea or concept agree with the real object, Liebniz required the agreement of one idea with another. <sup>53</sup>

## F. Wolff, Crusius, Lambert, Tetens

Wolff understood the Transcendentals to be predicable of being, but this is to be understood as referring to possible being, being in its most general sense. Possible being, for Wolff, meant logically possible; a possible being was one which did not involve an internal contradiction independent of the question of its actual existence. <sup>54</sup> The study of being, in its most general sense, was what Wolff

<sup>&</sup>lt;sup>51</sup>For a general discussion of this, see **Loemker**, pp. 149ff. <sup>52</sup>Compare for instance, **Berkeley**, *Principles*, section 118 with Leibniz, his letter to Francios de la chaise, May 1680. [In **Leibniz**, *Philosophical Papers and Letters*. Volume I, page 421.]

<sup>&</sup>lt;sup>53</sup> See **Liebniz**, op. cit., New Essays. Chapter V. <sup>54</sup>**Copleston** op. cit.,. Volume VI, Part I, pp. 128ff.



ontology, 55 and the Transcendentals were thus called transformed into purely logical concepts, defined in terms of logical possibility. The Transcendentals co-extensive with esse, but this esse was possible, not actual. Wolffian science was grounded in Wolffian ontology; the study of actual being was based on the study of possible being. <sup>56</sup> The Transcendentals were assured of application to actual being, but the appropriateness was no longer due primarily to their being co-extensive with real being. Rather they were specified by the "laws of thought" co-extensive with being in general. 57 The Transcendentals in Wolff had become predicates appropriate to all types of possible being; they pervaded our logical constructions, and therefore those logical constructions which were also actual.

Crusius reacted strongly to Wolff's ontology of possible being, and chose to begin with experience rather than logic. He argued that it is from the experience of things that we derive metaphysical ideas, rather than experience of things being (as in Wolff) a species of 'experience' of possible things. 58 Crusius does not equate logic or epistemology with ontology, as did Wolff, and thus is able to avoid the problems faced by Wolff when he

<sup>&</sup>lt;sup>5</sup> Lewis White Beck, Early German Philosophy. page 263.

<sup>&</sup>lt;sup>56</sup>See **John Randall** *The Career of Philosophy*. Volume II, page 59

<sup>57</sup> Ibid; Beck op. cit., pp 263 ff.

<sup>&</sup>lt;sup>58</sup> Beck, op. cit., . page 395.



attempts to model philosophy after mathematics.<sup>59</sup> Roughly the Transcendentals in this context must be seen as saying something about the nature of being *for us*, for they must meet certain epistemological criteria. They describe the way we think about being, in its most general sense.<sup>60</sup>

Lambert saw himself as completing what Wolff had begun, that is, the reduction of philosophy to mathematics (or, more accurately, geometry). 61 Lambert began with Lockean-like simple concepts which denoted things that had real existence. 62 The explicit distinction between logic and epistemology on the one hand, and ontology on the other, as found in Crusius is rejected by Lambert. 63 However, like both Wolff and Crusius, Lambert entertained a coherence view of truth resulting in his adoption of the notion of 'transcendent concepts'. These concepts are in fact the Transcendentals understood phenomenally. 64 For Lambert, a transcendent concept is one that has reference to more than kind of experience, and he draws this term and its meaning from the Mediaeval use of the Transcendentals as applied to reality. 65 The function of the Transcendentals in Lambert is to characterize human experience, but as the simple concepts still denote real entities, the

<sup>&</sup>lt;sup>59</sup> *Ibid*, pp. 263ff.

<sup>60</sup> This follows from certain remarks in **Beck**, op. cit., pp. 396ff.

<sup>&</sup>lt;sup>6</sup> *Ibid*, pp 402ff.

<sup>62</sup> Robert Caponigri. A History of Western Philosophy Volume III, page 435.

<sup>63</sup>Beck. op. cit.. page 407.

<sup>64</sup> *Ibid*. pp. 408ff.

<sup>&</sup>lt;sup>65</sup>*Ibid*. p. 408n.



Transcendentals also appear to describe, secondarily, reality.

Tetens draws a distinction between metaphysics (theoretical philosophy) and transcendent philosophy (ontology), which is the study of principles or elements of the most fundamental and abstract nature. These principles are precisely those which apply to more than one body of Knowledge. 66 Tetens argues that if metaphysics is to be unified, it must be grounded in transcendent philosophy, a discipline which is concerned with principles common to both intellectual knowledge (such as mathematics) and natural knowledge (such as the general sciences). 67 This view of transcendent philosophy removed reality as the object of the Transcendentals and replaced it with thought and the conditions of knowledge of things. The Transcendentals became co-extensive with the conditions of knowledge, they were the forms of thought. 68 However, in being co-extensive with the conditions of knowledge, pervading all of our thought, the Transcendentals pervade our thought of

<sup>66</sup> Ibid. page 412.

<sup>67</sup> Ibid.

must be understood, in the manner of Crusius and Lambert (and to some extent Mendelssohn), as a necessity for thought and a necessity growing out of thought. The analysis of the necessary conditions of knowledge eventuates in the knowledge of the necessary conditions of things, of whatever sort they may be, intellectual or physical." *Ibid.* page 414.



'things', hence our experience of and thought about reality.

In Wolff, Crusius, Lambert and Tetens the notion of the Transcendentals takes on, as has been alluded to above, a primarily epistemological emphasis, as opposed to the primarily ontological emphasis of the Mediaevals and their intellectual predessors. The Mediaeval application of the Transcendentals as convertible with being, as descriptive of reality simpliciter, was transformed in two important ways thinkers like the four discussed immediately above. In one sense, the Transcendentals had ceased to be understood as predicable of reality, but rather were now understood as having to do with our experience of reality, the distinction between reality and our knowledge of it beginning to be made. A second difference between the four German thinkers and the Mediaevals was that the Transcendentals had changed from the traditional esse, unum, verum and bonum to concepts like harmony, power and will. 70 The primary reason for such a change appears to have resulted from the increasing critical awareness of epistemological considerations when making statements about reality, rather than the rejection of the ontological basis of the Transcendentals. Within this context the Transcendentals became necessary universal predicates of thought, they were the most universal description of what we think about, and the way we think.

<sup>69</sup> Ibid.

<sup>70</sup>See Ibid. pp. 414ff.



#### G. Summary

Although the notion of the Transcendentals altered from primal notion of the unchanging and all-pervading ideas the for the Greeks to that of abstract concepts which apply to thought for the eighteenth-century Germans immediately prior to Kant, this transformation must be evolutionary, rather than revolutionary. The Transcendentals were introduced by Plato to describe the unity he required in reality, and Tetens introduced transcendent concepts to guarantee unity in metaphysics - the unity he required in our thought about reality. The Transcendentals originated as ontological predicates, as aspects of reality, but as philosophy developed they became logical predicates, and finally epistemological principles. This evolution of the Transcendentals from the ancient Greeks through the Mediaevals to the pre-Kantian Germans was not, however, an evolution of direction. Rather, we might regard the object of the Transcendentals as remaining constant, but the evolution occurs in the increasing critical awareness of the way in which the Transcendentals were applied to this unchanging object. More precisely, the evolution of the Transcendentals was not symptomized by the recognition that their original application was incorrect in the sense that there was no referent for them. What did occur was increasing criticalness of the way in which the Transcendentals were to be understood to be properly applied to reality, a result of the progress of philosophy in general.



This raises the question of the nature of the referent of the Transcendentals which I have claimed remained constant. Both Plato and Aristotle were aware that although there were various acts of 'mental positing' when diverse types of phenomenal objects were said 'to be', these diverse acts, if they were to be acts which were concerned with one reality, had to involve an underlying unity. It was recognized that there were, moreover, a number of concepts appropriate to more than one type of phenomenal object. Plato expressed this seeming universality of these concepts by delineating them as univocal predicates capable of taking any subject. Aristotle agreed with Plato, but was careful to point out out that when the predicates were applied to different categories of objects they were predicated equivocally - their meaning became inconstant. He recognised, however, that there seemed to be a universal root which was predicated of all things, namely esse. Plato and Aristotle did agree that there are certain notions that are properly applied in different 'categories' of reality, and that each of these notions has an unchanging 'core' denotation. Where these two thinkers disagreed was on how much the terms which were to become the Transcendentals differ from their core meaning.

The Latin Mediaevals illustrated the harmony between Plato and Aristotle with respect to the science of being quabeing. The Transcendentals were used to unify categorically different objects of experience, a unity which was seen as



necessary if there was to be any understanding of otherwise implacably differentiated realities. The Mediaevals recognized that there were different sorts of entities as objects of their experience of reality and that these objects were thought of in terms of certain relations with one another. This suggested to them that there must be principles of individuation and principles of unity. If the objects of experience were of categorically different types, then the question arose as to the apparent ability to understand those objects in terms of their relations among one another. In a more mundane sense we notice, they argued, that there are a number of predicates, such as 'good' which apply to more than one category of experience. In addition, from a strictly theological perspective, what sense could phrases like "God is good" have unless such terms as 'good' had a similar meaning when applied to God [infinite being] and creation [finite being]?

The solution to these problems appeared to lie in the concepts expressed by the Transcendentals, for they, in various formulations, explained the unity of reality through predicates co-extensive with reality. In one form or another the Transcendentals remained unchanged when they were applied to being in the most general sense. The unchanging object of the Transcendentals was undifferentiated being, being thought of apart from its peculiar mode of existence. Specific being was characterized on the other hand by the instantiation of particular qualities designated in their



most general form by the Transcendentals. These specific 'beings' possessed the Transcendental attributes of being insofar as they were part of being. The actual properties inherent in particulars were the 'shadows' or 'images' of the Transcendental attributes of undifferentiated being. The advance from Plato and Aristotle made by the Mediaevals can be illustrated through their increasingly sophisticated treatment of the Transcendentals, recognizing to an ever greater extent their mental nature, as descriptive of reality, rather than simply convertible with reality (in a strict ontological sense).

The period between Suarez and Wolff can be seen as a transition period, a period in which the nature of the way we think about our perception of the world changed drastically. The Transcendentals became aspects of our thought about reality, rather than aspects of reality itself. In Descartes the Transcendentals are the most universal ideas; in Berkeley and Leibniz they are mathematical entities or objects. In Spinoza the Transcendentals are co-extensive with real being, but this real being is not the phenomenal being of the perceived world, rather the intellectually discovered non-phenomenal single infinite substance. For these four philosophers the Transcendentals are mental constructions which reflect reality, which are not arrived at through 'inspection' of the but phenomenal world of experience. If there is any aspect of their thought which shows them to be transitional figures



with respect the Transcendentals, it is that they, for the first time, reject the world of sensation as the foundation of our knowledge, but rather look to thought and thought about the world for the principles of knowledge. It is within this framework that the notion of the Transcendentals is transitional in nature and application.

The Germans, from Wolff to Tetens, represent the climax of the 'intellectualization' of the Transcendentals prior to was incipient in the transition figures became explicit in the Germans immediately prior to Kant. The Transcendentals for these thinkers are ideas which pervade human thought, irrespective of the particular object of thought. This object of thought may be within the domain of sciences or within the boundary of the natural theoretical sciences. These particular ideas are regarded by the Germans as the forms of thought; they are the most abstract foundational aspects of the way we think about things in general. Whether we begin with experience and extract the Transcendentals through consideration of the ideas we have resulting from experience, as did Crusius, or try like Wolff and Lambert to describe experience in terms of the a priori forms of thought, 71 and then apply them to experience (since experience is but one form of thought, i.e. that form which deals with actual existents) the

<sup>&</sup>lt;sup>71</sup>This is to anticipate what Kant said, and the way he said it, but then as these thinkers immediately preceded Kant, and as Lambert corresponded with Kant, I do not think this an incorrect or misleading formulation of their position. It also helps to 'set the stage' terminologically.



Transcendentals are to be primarily understood in terms and the way we think. Perhaps the general position the Germans is best illustrated by Tetens. recognized that the unity we were concerned with was a conceptual or epistemological unity, not so much an actual unity of reality as much as the unity of our thought about reality. He recognized that if we were to explain the relations between different experiences, then there must be principles foundational to all and every form of experience and these principles must be forms of thought, transcendent ideas which dictate and describe the conditions of the knowledge of things. It was these transcendent ideas which performed this function, and which were Tetens' Transcendentals. This interpretation was the result of an increasingly critical and philosophically aware tradition concerned with the basic epistmological question posed by Plato and developed through successive thinkers concerning the ultimate unity of the reality we experience and think about. The Transcendentals had not changed in meaning, they been applied to reality in an ever-increasingly careful fashion as the epistemological problems and their tentative were gradually understood in increasingly solutions sophisticated and clearer ways.



# II. THE CONCEPT OF THE Transcendentals IN THE FIRST CRITIQUE OF KANT

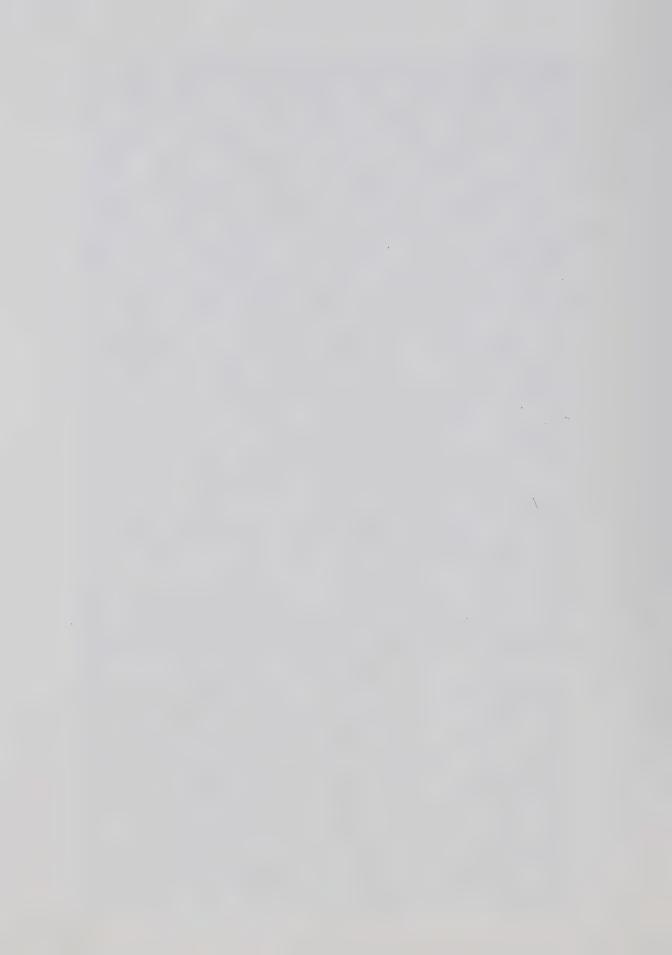
#### A. The First Critique And The Tradition

In the First Critique there is a key passage which will serve as the theme for this chapter, and because of its relative importance is worth quoting in full despite its length. This passage serves two purposes: (1) it demonstrates Kant's the 'Transcendental' awareness of tradition; and (2) it presents his own understanding of concept of Transcendental in relation to that tradition. The remainder of this chapter will show that his application of the term 'Transcendental' is consistent with the description of Transcendental in the passage quoted below, and that use Transcendental represents an evolution of understanding of the concept rather than a 'revolution'.

In the Transcendental philosophy of the ancients there is included yet another chapter containing pure concepts of the understanding which, though not enumerated among the categories, must, on their be ranked as *a priori* concepts of objects. This, however, would amount to an increase in the number of the categories, and is therefore not feasable. They are propounded in the proposition, so famous among the Schoolmen, quodlibet ens est unum, verum, bonum. Now, although the application of this principle has proved very meagre in consequences, and has indeed yielded only propositions that are tautological, and therefore in recent times has retained its place in metaphysics almost by courtesy yet, on the other hand, it represents a view seem to be, however empty it may which, maintained itself over this very long period. It therefore deserves to be investigated in respect of its origin, and we are justified in conjecturing that it has its ground in some rule of



understranding which, as often happens, has only been wrongly interpreted. These supposedly Transcendental predicates of things are, in fact, nothing but the logical requirements and criteria of all knowledge of things in general, and prescribe for such knowledge the categories of quantity, namely, unity, plurality, and totality. But categories, which, properly regarded, must be taken material, belonging to the possibility of the things themselves [empirical objects], have, in this further application, been used only in their formal meaning, as being of the nature of requisites of all knowledge, and yet at the same time have been incautiously converted from being criteria of thought to be properties of things in themselves. In all knowledge of an object there unity of concept, which may be entitled qualitative unity, so far as we think by it only the unity in combination of the manifold of our knowledge: as, for example, the unity of the theme in a play, a speech, or a story. Secondly, there is truth, in respect of its consequences. The greater the number of true consequences that follow from a given concept, the more criteria there are of objective reality. This might be entitled the qualitative plurality of characters, which belong to a concept as to a common ground (but are not thought in it, as quantity). Thirdly, and lastly, there is *perfection*, which consists in this, that plurality together leads back to the unity of the concept, and accords completely with this and with no other concept. This may be entitled qualitative completeness (totality). Hence evident that these logical criteria of possibility of knowledge in general are the three categories of quantity, in which the unity of the production of the quantum has to be taken homogeneous throughout; and that these categories are here being transformed so as also to yield connection of heterogeneous knowledge in consciousness, by means of the quality of knowledge of the principle of the connection. the criterion of the possibility of a concept (not of an object) is the definition of it, in which unity of the concept, the truth of all that may be immediately deduced from it, and finally, completeness of what has thus been deduced from it, vield all that is required for the construction of the whole concept. Similarly, the criterion of an hypothesis consists in the intelligibility of the assumed ground of explanation, that is, in its unity (without any auxiliary hypothesis); in the truth of consequences that can be deduced from it (their accordance with themselves and with experience); and



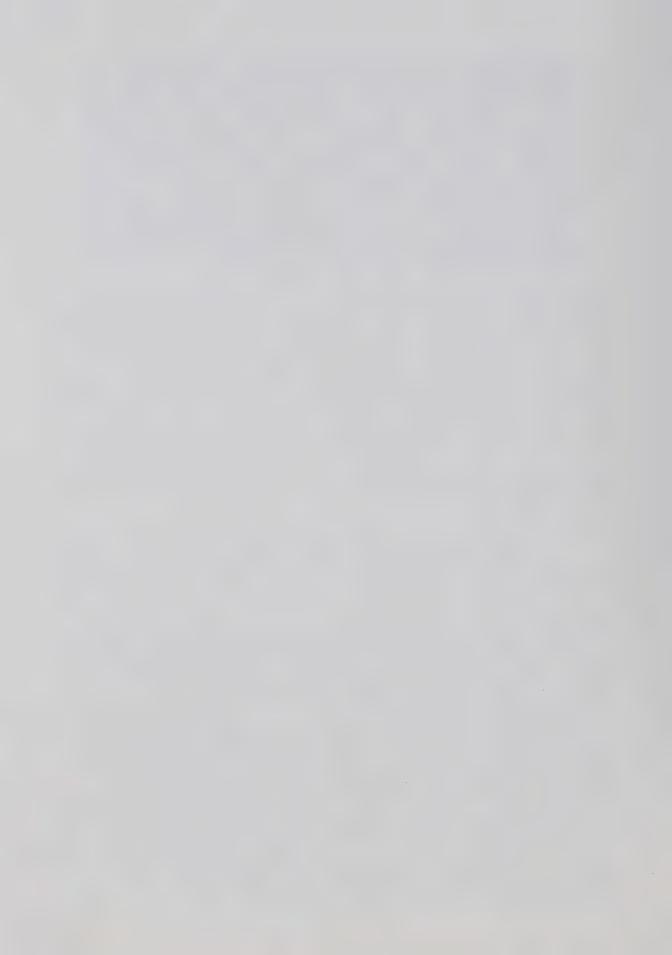
finally, in the *completeness* of the ground of explanation of these consequences, which carry us back to neither more nor less than was assumed in the hypothesis, an so in an *a posteriori* analytic manner give us back and accord with what has previously been thought in a synthetic *a priori* manner. We have not, therefore, in the concepts of unity, truth, and perfection, made any addition to the table of the categories, as if it were in any respect imperfect. All that we have done is to bring the employment of these concepts under general logical rules, for the agreement of knowledge with itself — the question of their relation to objects not being in any way under discussion. 72

The precise origins of Kant's critical method are not a matter of concern here, although there is clear evidence that his method was arrived at through reflections on the efforts of such people as Baumgarten, Wolff, Crusius, Tetens and Lambert. 73 However, it would be useful to outline the nature of the transition in the meaning 'transcendental' during the years immediately prior to the publication of the First Critique.

As evidenced by the above quote, and as already indicated, Kant was not only aware of the distant tradition concerning the Transcendentals, but was also aware of, and

<sup>72</sup> Kant, Critique of Pure Reason. B113-116;118f. (That is, pages 113-116 in the 'B' edition of the Critique; pages 118f of the Kemp-Smith translation. All simple references to pages in the First Critique will be embeded in the text in the above abbreviated fashion.)

<sup>73</sup> For instance Harold Griffing ("J.H. Lambert: A Study In the Development Of the Critical Philosophy") argues quite persuasively that Lambert was Kant's immediate pre-critical ancestor. Beck(op. cit., pp.260ff, 380ff) portrays Wolff, Crusius, Tetens and Lambert as paving the way for Kant's First Critique, while Ewing remarks that Baumgarten's Metaphysica was used by Kant for his university lectures up until his death(Ewing, A Short Commentary on Kant's Critique of Pure Reason., page 198.) One might also examine the numerous scattered comments in various studies, such as Kemp Smith's A Commentary to Kant's Critique of Pure Reason or H.J. Patons's Kant's Metapysic of Experience.



influenced by, his immediate predecessors. In the previous chapter it was argued that the concept of the Transcendentals had progressed to the point where they could be understood as describing the conditions of knowledge, or, as in Wolff and Lambert, as a priori forms of thought. 74 Ignacio Angelelli, in a discussion of an article by N. Hinske<sup>75</sup> makes a number of points which aid in understanding the evolution of Kant's use of 'transcendental' from that of his predecessors. There appears to have been three major groups of 'transcendental candidates' that were receiving attention during Kant's intellectually formative years. One thinkers, the post-Renaissance metaphysical of tradition, understood "transcendental" as predicative over entire theories. On this view, to characterize a theory as transcendental was to claim that the theory is about the Transcendentals (where 'Transcendentals' was understood in the Scholastic sense). To a second group, represented by the Wolffian cosmologia transcendentalis, 'transcendental' meant a priori theory. The third use of transcendental occurs in Baumgarten's Metaphysica, where 'transcendental' signifies being itself, although this sense appears to be unrelated to the older, Mediaeval sense. 76

 <sup>74</sup> See above, pp.20ff, 29.
 75 Ignacio Angelelli "On the Origins of Kant's transcendental"

<sup>76</sup> Angelelli op. cit., page 118. Angelelli's discussion should be treated in part as a critical review of Hinske's earlier article. (Hinske, N. "Die historischen Vorlagen der Kantischen Transzendentalphilosophie" in Archiv fur Begriffsgeschichte, Band XII (1968), pp. 86-113.)



Although the first use of transcendental (above) is a step beyond the Scholastics, the second sense seems to more clearly anticipate Kant. In this sense, to describe a theory (set of propositions) as transcendental is to claim that the theory is a priori. 77 Angelelli argues, however, that it is the third sense of the term transcendental, that of Baumgarten's Metaphysica, which offers an even stronger 'link' than Wolff's cosmologia transcendentalis. In Angelelli's opinion, Baumgarten uses 'transcendental' to indicate the way predicates which constitute an essence are "held together", or are "one". 78 Angelelli then observes that:

It is not necessary, however, to make any empirical assumption about Kant's actual choice of the word 'transcendental'. It is sufficent to observe that, given (1)Baumgarten's use, (2) Kant's philosophical program and last but not least (3) the already established use of 'transcendental' as predicate of theories, it is only natural that the word acquired its Kantian meaning.<sup>79</sup>

Given that there were two competing historical traditions current during the years immediately prior to Kant (viz. "transcendentality as universality" and "metaphysics as scientia possibilium") it can be seen how Kant may have aquired Baumgarten's use of the term transcendental. It remains, however, to do two things: (1) uncover the precise

<sup>77</sup> Ibid.

<sup>78</sup> *Ibid.*, page 120: "The predicates that constitute an essence are not transcendental, singly taken. Rather, the way in which they "hold together", or the way in which they are "one", is transcendental...".
79 *Ibid.*, page 121.



sense of *transcendental* in the *First Critique*; and (2)examine this sense to determine its affinity to the uses and senses it had for previous thinkers.

## B. The Kantian Definition of Transcendental

In the section from the First Critique quoted above (pp.33ff) Kant remarked that what the Ancients had incorrectly thought to be ontological predicates were, in fact, actually epistemological criteria, necessary conditions for the knowledge of objects (B113f;118). He recorded the phrase quodlibet ens est unum, verum, bonum (B113; 118) and then proceeded to say that these supposedly transcendental predicates of being were in fact the categories of quantity improperly applied (i.e.) applied to things in themselves rather than to empirical objects). Such remarks are indicative of the way Kant understood 'transcen-'transcendental' does not qualify things-in-themselves, but is rather used with respect to the knowledge of things in general; 'transcendental' qualifies the nature of the logical requirements for the possibility of the knowledge of things. 80

Earlier in the First Critique Kant gives us an explicit definition of transcendental:

<sup>80</sup> See **Kemp Smith** op. cit. p.74: "transcendental knowledge is knowledge not of objects, but of the nature and conditions of our a priori cognition of them."



The term 'transcendental', that is to say, signifies such knowledge as concerns the *a priori* possibility of knowledge, or its *a priori* employment. (A56=B80f; 96)

We are also provided, in his discussion of space, with what Kant understood a proper application of the term transcendental to be. For Kant space was not a transcendental representation, but rather the knowledge that spatial representations were not empirical in origin was transcendental. However, if space were applied to objects in *general*, space would be transcendental(A56= B81;96). The quote, and Kant's subsequent example, conjointly define the and necessary requirement for the characterization of a proposition, act or other significand as transcendental - that it be concerned with, or signify the a priori possibility and employment of knowledge. 81 Elsewhere, Kant again argues that for an act to be entitled 'transcendental', it must be a priori (take place a priori) and condition the possibility of other a priori knowledge. It signifies knowledge and acts which are both a priori and which govern, restrict, permit and in general condition all knowledge or experience, both a priori and a posteriori.

<sup>81</sup>This point is echoed by such people as Kemp Smith op.cit. and Patricia Crawford: "transcendental propositions are not based on actual intuitions, but on the possibility of intuition or empirical experience." ("Kant's Theory of Philosophical Proof", p.262) or M. Glouberman: "According to Kant, the claim that appearances have spatial organization expresses a transcendental principle. It specifies a structural necessity of experience." ("The Distinction Between "transcendental" and "Metaphysical" in Kant's philosophy of Science', page 379).



Our understanding of the precise meaning of the term transcendental in the First Critique can be enhanced by examining the comparison Kant draws between transcendent. In A296=B352 Kant writes that transcendent principles are those which profess to pass beyond the limits of possible experience. Kant is specific when he compares transcendental with transcendent thev interchangeable (A296=B352;299). When psychology attempts to prove things beyond the reach of possible experience, it is properly entitled 'transcendent' (B427; 380), or when an idea lies or professes to pass beyond all possible experience, it is transcendent (A565=B593;483). Perhaps most importantly for the purpose of this study, Kant argues that when stray into the transcendent, we adopt grounds of explanation which are incapable of representation in concreto (A562=B590;481). The appellation 'transcendent' for Kant, in every case where he is discussing its proper application, singularly refers to experience, ideas or acts which claim to pass beyond possible experience. This stark opposition to 'transcendental', which, as argued, is solely concerned with possible experience. 82

In those places where Kant defines 'transcendental' explicitly he remarks that (1) it is concerned with our <sup>82</sup> William Bossart ("Is Philosophy transcendental?") points out that Kant defines transcendent as that which passes beyond the limits of possible experience (p. 293). He then writes that "In contrast to transcendent knowledge, transcendental knowledge is about how the a priori structure of the mind determines in advance the general structure of all objects of possible experience." (p.294)



knowledge of objects, rather than the objects themselves; (2) it is a priori, rather than a posteriori; (3) it is concerned with experience in general, with the knowledge of objects in general; and (4) it deals only with possible experience and not with objects or propositions which profess to pass beyond possible experience. In the sections of the First Critique dealt with thus far, it is clear what is meant by 'transcendental'. The term 'transcendental' characterizes the universal and necessary conditions for our knowledge of objects, for experience in general. It remains to be seen whether this characterization is appropriate when Kant uses 'transcendental' to qualify other acts, subjects or structures, and whether this use of the term transcendental is indeed univocal in the First Critique, at least in intention.

## C. Transcendental As Modifying an Activity

Kant writes that "Philosophical knowledge is the knowledge gained by reason from concepts" (A713=B741;577).83
This view of philosophical knowledge is echoed elsewhere in the First Critique.84 Philosophy for Kant appears to be concerned with the knowledge gained from concepts.

<sup>\*3</sup> Kemp Smith, op. cit., argues that for Kant philosophyin the First Critique is the study of the relation of knowledge to human reason(p. 581). Paton writes that Kant understands Philosophy to be discursive knowledge i.e., knowledge that is arrived at through thought about an 'object' (pp. 216ff). \*4For example, where Kant records that "All knowledge arising out of reason is derived either from concepts or from the construction of concepts. The former is called philosophical, the latter mathematical." (A837=B865;656)



Transcendental philosophy, on the other hand, may be described as the system of all principles of pure reason (A15=B27;60). It is not the analysis and dissection of concepts, but rather the analysis and dissection of the faculty of the understanding from which these concepts proceed. 85 Transcendental philosophy is concerned with determining the universal conditions of our knowledge of objects, and discovering the proper application a priori of the rules which govern pure reason over all possible instances.86 Thus the subject matter of transcendental philosophy is pure reason, and is concerned with 'objects' only insofar as those 'objects' are objects in general (A290=B346;294). Kant points out that within transcendental philosophy no question concerning an object given to pure reason is insoluble, for in transcendental philosophy the very concept which puts us in a position to ask a question also must allow us to answer it (A477=B505:431).87

87Presumably because (as was mentioned earlier) transcendental philosophy deals with the principles of pure reason (and subsequently all knowledge), hence it includes the principles of any question that could be formed about pure

reason.

<sup>85</sup> See for instance **Brennan** "The Latent Potential of the Notion of Transcendental". Brennan also notes (p. 4) that for Kant transcendental inquiry was concerned with the *a priori* constitution or structure of the mind (pure reason). 86 Kant records that transcendental philosophy contains all that is knowlable *a priori* (B151n) It is (1) the universal condition of rules given in the pure concept of the understanding and (2) specifies *a priori* the instances to which the rules apply(A135=B174).



From the preceeding, it is evident that transcendental philosophy differs from philosophy simpliciter in at least these respects, as far as Kant is concerned: (1) whereas philosophy is concerned with knowledge gained by reason from concepts, transcendental philosophy is concerned with the a priori determination of knowledge gained from concepts, and in fact (2) rather than be concerned simply with the analysis and dissection of particular concepts, transcendental philosophy deals with the a priori use and application of concepts in general together with (3) the universal conditions of their proper application. 'Transcendental' in this application modifies the conception of philosophy in such a fashion that it delimits philosophy as dealing with the universal conditions of our knowledge of objects (in general). Transcendental alters the meaning of philosophy from that of knowledge derived from concepts to knowledge derived from concepts insofar as that knowledge is concerned with the a priori application of these to experience in general. Transcendental philosophy is philosophy devoted to understanding the conditions of experience in general insofar as this understanding is arrived at through or deals with concepts (pure reason).

Kant discusses the notion of the *transcendental* employment of such things as concepts, categories, reason, and the understanding. In each of these instances, transcendental affects the meaning of employment so that it is in respect of possible experience, or of objects in



general(seeA238= B298;259). The transcendental employment of the understanding is the unity of the thought of the manifold *in general* (A247=B304;264). In like manner, we may consider the transcendental employment of the categories for Kant as their employment in general without regard to specific objects of intuition. 88 Kant writes that the transcendental employment of reason is discovered when we examine the logical form of knowledge through reason(A329=B386;320). It is reason considered in accordance with concepts, that is, reason understood independent of its specific application to an intuition(A711=B739;575). What emerges from the way Kant discusses the notion of transcendental employment is that it is employment with respect to experience in general, and with regard to the conditions and limits of possible experience.89

Kant describes the act of transcendental synthesis as being the a priori combination of the manifold, if it is represented as a priori necessary in relation to the unity of apperception (A118;143). What makes the synthesis transcendental is its a priority together with its application to all possible experience. This function of unifying the

<sup>\*\*</sup>At A248=B305 Kant argues that the transcendental employment of the categories is really no employment at all, for there is no determinant object, even a formal object, to subsume under them. This is because such an employment of the categories is possible only without conjunction with sensible intuition(A258=B314).

<sup>89</sup> See Kant's remarks concerning the transcendental misemployment of the categories, and the contrast he draws between this and what he calls transcendent misemployment at A296=B352f.



manifold is not restricted to a particular intuition, but is rather a general application to intuition in general. It is a description of the *a priori* function of the faculty of the imagination in experience. 90 Kant points out that the transcendental synthesis of the imagination is not simply the *act* of synthesis of the manifold of intuition towards a unity through the categories (B151;165), but that it is rather the power to do so (B154;166). Thus when Kant writes that the transcendental synthesis of the imagination effects the unity of the manifold of intuition in inner sense, we are not to understand him as making a claim about the actual synthesis of an actual intuition. Rather, as hints like 'power' and 'a priority' suggest, Kant is speaking about the logical or epistemological criteria necessary for the possibility of experience.

The term transcendental is also used by Kant to modify such acts as reflection, comparison, and inquiry. Transcendental reflection is concerned with representations—its aim is to determine whether a representation belongs to sensibility or to pure understanding(A261= B317;277). Opposed to ordinary reflection, transcendental reflection contains the ground for the possibility of the objective comparison of representations; 91 through it we are able to determine the relationship between the cognitive faculty to

<sup>90</sup>See A123;146.

<sup>&</sup>lt;sup>91</sup> Davidson Alexander distinguishes Kant's understanding of logical (ordinary) from transcendental reflection. The former for Kant is the "mere act of comparison", unlike transcendental reflection. (p. 454)



which the representation belongs and pure understanding or sensibility. 92 Transcendental *comparison* is concerned with all possible experience, or experience in general, as opposed to the comparison of two or more specific intuitions (see A573=B601;489). Similarly, a transcendental *inquiry* must deal with concepts alone, rather than with specific instances of concepts (A558=B586;479). Throughout the *First Critique* Kant is consistently repeating one thing: for any activity, if it is to have transcendental implications, it must deal with the nature and possibility of the experience of objects in general. The designation 'transcendental' earmarks the activity in question as seeking the fundamental and universal constitution of our knowledge of any and all objects of possible experience.

## D. Transcendental As Modifying a Discipline

There are a number of major divisions of the *First Critique*, but an examination of what Kant means by four of them will provide a clear understanding of the concept of transcendental as it designates a peculiar type of 'discipline' within the confines of a critique of pure reason. Baumgarten is credited with introducing the notion of "aesthetics" to refer to sensible knowledge, an

<sup>92 &</sup>quot;The act by which I confront the comparison of representations with the cognitive faculty to which it belongs, and by means of which I distinguish whether it is as belonging to the pure understanding or to sensible intuition that they are to be compared with each other, I call transcendental reflection" (A261= B317;276f).



application adopted by Kant. 93 In contrast to this use of 'aesthetics' as dealing with sensibility (both in terms of sensibility simpliciter and 'sensibility' considered with respect to beauty) Kant distinguishes the more fundamental discipline of a transcendental aesthetic, the science of all principles of a priori sensibility (A21=B36;66). This is accomplished through isolating sensibility (A62=B87;100) and demonstrating that there are both pure and empirical intuitions(A55=B80;95). This science is able to determine the limits of the employment of the pure forms of sensible intuition (B148;163) and prove that appearances are not things in themselves(A357;338).

Formal or General Logic Kant understood to contain the necessary rules for *all thinking*, independent of the source of the knowledge reason is dealing with. 94 transcendental *logic* on the other hand, isolates the understanding (A62=B87;100) and consequently is concerned solely with the laws of the understanding insofar as they relate *a priori* to objects (A57=B82;97). Its purpose is the determination of the scope and limits of pure understanding (A154=B193;192) and thus is concerned with the explanation of the possibility of synthetic judgements *a priori*. 95 Transcendental logic therefore is able to provide the canon of objectively valid and correct employment for understanding

<sup>93</sup> See Encyclopedia of Philosophy, Volume I, p.256.

<sup>94</sup> See Paton, op.cit., I, 222f. 95 A 154 = B 193. I have employed F. Max Mueller's translation of the First Critique here.(p. 130)



and judgements (A131=B170;177). In effect, what transcendental logic is designed to do is study all synthetic *a priori* thinking and its application to objects of thought in general.

In contrast to an analytic which may be thought of as the critique or practice of logical analysis (or in Kant as the analysis of the formal criteria of truth) the transcendental analytic must be understood as dealing specifically with the pure understanding, with the principles underlying experience in general (A62=B87;100). Kant writes that the transcendental analytic in the First Critique dissection of all a priori knowledge into elements yielded by pure understanding (A64=B89;102). This 'positive' examination of the understanding is counterposed with a 'negative' treatment, specifically the transcendental dialectic, a critique of understanding and reason when they are improperly employed (A63=B88;100). It exposes what Kant calls transcendent judgements, illusion of judgements brought about through improper application of the pure concepts of the understanding, when they are employed beyond the limits of possible experience. 96

In describing a *deduction* as transcendental, Kant remarks that it must show that what is deduced is both *a priori* and concerned with the knowledge of objects of other transcendental Dialectic exposes illusions

<sup>96</sup>In effect, the transcendental Dialectic exposes illusions which are none the less natural to reason. These illusions spring from the nature of the human understanding, and as such require a special, fundamental dialectic to expose them. (See A277=B354, and A333ff=B390ff.)



intuitions in general (B159;170).97 Another way to say a priori is to say that it is independent of empirical principles, or that it has no empirical factor. This Kant does in describing the transcendental proof (A591=B619, A614=B642).

When transcendental helps to modify a notion such as *principle*, it modifies its application in such a fashion that the principle in question is understood to apply to possible experience, and that it is both objective and necessary (A663=B691;545, A648=B676;536). An example is provided by Kant: one transcendental principle of reason is that reason must seek unity — for example, the systematic

<sup>97</sup> A deduction for Kant is a defense for a claim of *legal* right (A84=B116ff). Jay Rosenburg writes that "A transcendental deduction is a justificatory argument legitimizing the employment of a particular conceptual core in the having of certain experiences - and these are to be experiences which themselves could not be had were we not in possession of and deploying just that conceptual core." (p. 619) Thus, what Kant provides in the transcendental deduction is a legitimization of such concepts as necessity and causation for all experience. This concern with both the a priority and the inclusion of all possible experience can be seen in Kant's discussions of the deduction of a priori concepts. At A44=B126 he points out that if the deduction is transcendental, it must show how the concepts can be recognized as a priori conditions for the possibility of experience. In the section beginning at A669=B697 Kant argues that in order to prevent the types of illusion exposed by the transcendental dialectic from deceiving us. all a priori concepts must be given a transcendental deduction. Such a deduction is able to validate the use of concepts for possible experience. Phillip Griffiths notes that "Kant calls an argument which purports to show that a concept may be employed in judgements a deduction. A transcendental deduction will be required where an empirical deduction is not possible because of the a priori character of the concept." (p. 165)



unity of nature (A648=B676;536).98 A transcendental distinction is exemplified for Kant by that drawn between phenomenon and noumenon (A44f=B62f;84). A transcendental law is characterized by the fact that it precedes its application in experience, and indeed is the ground of experience and is presupposed by experience (A110;137f, A660=B688;543f). This is all summed up by Kant when he discusses the subject of transcendental knowledge. transcendental knowledge, Kant writes, is concerned with the nature of the knowledge of objects, insofar as this knowledge is possible a priori (A12=B25;59). That is to say, transcendental knowledge is that by which we know that and how certain representations are possible, and can be used independently of any empirical considerations, i.e., for any possible experience (A56=B80;96).

## E. Transcendental As Modifying a Condition Or Relation

The unity of consciousness is transcendental for Kant when the possibility of a priori knowledge arising from it is shown (B132;153). The transcendental unity of apperception requires that knowledge be someone's knowledge, the knowledge of unified consciousness (A117=B220; 210). This transcendental unity of apperception is the original unity of self (A107;136), the basic unity which precedes all

<sup>98</sup> M. Glouberman points out that a transcendental principle specifies for Kant a "structural necessity of experience". (p. 379) He cites Kant's example of all experiences having spatial organization as just such a principle.



the data of experience, and which makes all experience possible (A107;136). This unity of apperception is known a priori, and is entitled transcendental for it conditions the possibility of the manifold of experience in one knowledge (A118;142). This unity of apperception is transcendental because it forms a basis for the connection of all representations (all possible appearances which can stand alongside one another in one experience) according to laws (A108;136).99

The unity of apperception is a transcendental ground of the necessary conformity of all appearances in one experience (A127;148) while the synthesis of apprehension constitutes the transcendental ground of the possibility of all modes of knowledge (A102;133). In both these instances, 'transcendental' refers to the necessity of the ground for the possibility of thought of the object (A106;135). A cognate of 'ground', presupposition, is deemed transcendental by Kant if it preceeds all experience, and in fact makes all experience itself possible (A107;136, A573=B601;488). A ground or presupposition is transcendental for Kant, when it is a necessary condition for possible experience; it is a transcendental condition of experience, which is expressed

graphics transcendental unity of apperception is to be distinguished from the empirical unity of apperception, the empirical self-consciousness. Such empirical unity is the contingent expression of the 'fact' of our awareness of the underlying transcendental unity of self. The possibility of knowledge does not require the empirical unity alone, rather such knowledge and the empirical unity requires the transcendental unity of apperception for its possibility. (See A107, A115f, B132, B140).



by its necessity for all experience (A106;135).

There are a number of related expressions, a few of which are worth noting in that they help to underline the univocacy of meaning that transcendental has in the First Critique when Kant is discussing conditions or relations insofar as they are concerned with our knowledge of objects. For instance, Kant mentions transcendental content as that which is introduced to give unity to judgements intuition by the understanding (A79=B105;112f). There is a transcendental consideration - that logical reflection does not belong to the same faculty of knowledge as transcendental reflection (A262=B319;2768). transcendental affinity refers to the thoroughgoing connection discoverable in all experience according to necessary and universal laws (A114; 140). transcendental dualism regards outer appearances as objects outside us, completely separating them from the thinking subject (A389;357f). In all of these expressions, what emerges is that the use of transcendental alters the application of the words or phrases in question in a unique fashion. The introduction of 'transcendental' indicates that we are using the words or phrases it modifies to speak about the necessary conditions of possible experience, of experience in general.



# F. Transcendental As Characterizing Entities and Concepts

Perhaps the most controversial use of transcendental is when it is used to designate a particular type of object, the transcendental *object*. Part of the controversy arises from the claims of people such as Kemp Smith that the notion of the transcendental object is pre-critical, and indeed is used in a sense differing from the use of transcendental found elsewhere in the *First Critique*. 100

Kant writes that the transcendental object cannot be intuited by us: it is an object=X, which underlies representations. We cannot know anything of it, as it is an object in general (A250;268, A279=B335;288). Moreover, although it is the ground of appearances, we should not be able to understand its nature (A277=B333;286). The transcendental object is the purely intelligible cause of appearances (A494=B522;441), indeed it determines appearances as mere representations (A538=B566;476) although

<sup>100</sup> Kemp Smith (op. cit.) argues that there are three senses of transcendental discernable in the First Critique. The first sense, the sense that I am arguing is the only intended sense, is concerned with the a priori nature and conditions of possible experience (p. 74). A second sense Kemp Smith claims to have discovered is transcendental as denoting a priori factors in our knowledge of objects, those factors which underlie all experience, which condition it in order that it may be knowable (p. 75). Finally, a third use or sense claimed by Kemp Smith is the extension of the term from the a priori concepts and intuitions to the processes and faculties to which they are due. In this sense transcendental becomes a title for the conditions which make experience possible. Since conditions or processes are not a priori Kemp Smith argues, this is distinctly a third sense of 'transcendental' (p. 76). As shall be seen below, this is a rather unfounded objection, as is the idea that the notion of the transcendental object is pre-critical, since it is evident throughout both editions of the First Critique.



it lies at the base of appearances and is nevertheless inscrutable (A613f=B641f;514). The transcendental object is thus in Kant's eyes a transcendental condition for possible experience; it is not itself an object of possible experience, rather it is an *a priori* condition, without which knowledge of objects is not possible.<sup>101</sup>

Kant describes transcendental *ideas* as *a priori* concepts which determine how reason is to be employed(A321=B378;315). They are pure concepts of reason, which are not arbitrarily invented but rather are imposed by the nature of reason itself, and they therefore stand in necessary relation to the whole employment of reason (A37=B38;318). They are necessary products of reason, (e.g. A338=B396;327) but they *overstep* the limits of possible experience, and are thus capable of improper, *transcendent* employment (see A327=384;319) although they are as natural to reason as the categories to understanding(A642=B670;532).

<sup>101 &</sup>quot;The transendental object is called an object because it is that in the concept of which all representations are united, or, otherwise put, it is the ground of representation itself. It is called transcendental not because it is beyond experience, but because it is a necessary condition of objects of experience. Kant says in B25, B80 and B81-82 that knowledge is called transcendental when it is knowledge a priori concerned with the possibility of knowledge of objects. The transcendental object is beyond experience in that it is the ground of experience and not an object of experience." ( Donald Dunbar, page 133, "The transcendental Object"). In the same article Dunbar argues that the transcendental object is the material cause of objects. and hence plays the same role as Aristotle's prime matter. 102This seeming conflation of transcendental and transcendent as evidenced by what Kant seems to be saying here is rather easily resolved by considering A643=B671ff.



These ideas are transcendental because they constitute a portion of all possible experience (see A327=B384;318f); they represent the synthetic unity of the thinking subject in all his experiences by presenting the unity of thought in general, as is evidenced by Kant's example of universality (A644=B672;533) or by the ideas of the unity of the thinking subject, the unity of the series of conditions of appearances, or the unity of the conditions of all objects of thought in general (A334=B391;323).

Transcendental concepts extend the unity of the understanding to the manifold of an intuition (A322f=B379f;316), but they do not belong to appearance — they govern it (A591=B619;500). Examples of such concepts are the transcendental unity of apperception (A341=B399;329) and the concept of God as the idea of something which is the ground of all empirical reality and which has necessary unity (A675=B703;553). While the transcendental concepts extend the unity of the understanding, the transcendental schema is that representation which enables these concepts to be applied to all appearances, and vice versa (A138=B177;181). When, however, transcendental concepts are improperly applied to appearance, that is, they are mistaken to be empirical in origin, the result is transcendental

<sup>102 (</sup>cont'd) Kant immediately sets us straight on how he understands the distinction to be made: the transcendental ideas have a proper use as long as they are not thought to be concepts of real things, but when we make this error, they pass beyond possible experience, and become transcendent. Therefore we may employ them regulativly, but never constitutively (A644=B672;533ff).



illusion (A295=B351f;298)— the miscontruction of the subjective necessity of a connection of concepts for an objective necessity of things in themselves (A297=B353;299). Such transcendental illusion might be the result of taking a transcendental representation, such as self-consciousness (A113;140) as being a product of empirical necessity.

Kant mentions the transcendental product of the imagination - the synthesis of the imagination is concerned with the determination of inner sense in general (A142=B181;183). He also mentions the transcendental location, that is, the place we assign a concept, either in sensibility or in pure understanding (A268=B324;281). There is the transcendental faculty [distinguishable from a logical faculty (A299ff=B355ff; 300f)], such as the reproductive faculty of the imagination (A102;133). Transcendental reality is defined by Kant as being subjective reality, there being no consideration or involvement of empirical factors (A339=B397;327). Transcendental consciousness is the bare representation of the 'I' in relation to all other representations (A118n; 142n). Finally, the transcendental subject, which is empirically unknown to us (A545=B573;471f), is the subject of all thoughts experiences, and=X. It is the subject of the transcendental unity of apperception (A346=B404;331).



#### G. Miscellaneous Uses of Transcendental

'Transcendental' occurs numerous times throughout the First Critique modifying a number of otherwise unrelated Kant writes that a transcendental possibility of things is that an object (or 'thing') corresponds to some concept of a thing (A244=B302;262f). transcendental propositions are synthetic knowledge arrived at through pure reason, in accordance with concepts which make possible the unity of empirical knowledge. (A722=B750;583).103 Kant notes that they may have only one transcendental proof, since we begin with a single concept and assert the possibility of the object in question in accordance with the concept (A787=B815;624). (A transcendental proof for designed to demonstrate how in general a concept determines an object.) transcendental questions are those which go beyond nature, and can never be answered (A277f=B333f;286) since they permit only transcendental answers i.e., answers based exclusively on concepts a priori (A637=B665;529). Examples of such questions are "What can I know?" (A804ff=B832ff:635f) and "What is the relation of the empirical object to the object in itself?" (A46=B63;84f).

Kant describes transcendental *ideality* as the doctrine that a something (space) is nothing at all once we withdraw its limitation to possible experience (A28=B44;72). With

Proof"): "transcendental propositions are not based on actualintuition, but on the possibility of intuition or empirical experience." (pp. 259f) They deal with all experience, indeed with all possible experience.



respect to time, Kant writes that once the subjective conditions of sensible intuition are removed, time is nothing, and, like space, cannot be ascribed to things in themselves (A36=B52;78). The transcendental doctrine of elements determines the nature and extent of pure reason (A707=B735;573) while the transcendental doctrine of method determines the formal conditions of a complete system of pure reason (A707f=B735f;573). Transcendental meaning is the meaning of the pure categories, apart from the formal conditions of sensibility (A248=B305;265). A transcendental paralogism produces a purely one-sided illusion with regard to the idea of the subject of our thought (A406=B433;384) while a transcendental problem is like that which confronts us when we try to reconcile freedom with universal causality (A542=B570;469).

Transcendental assertions in the First Critique are those that lay claim to insight into what is beyond the field of all possible experiences (A425=B453;396). A transcendental hypothesis uses an idea of reason to explain natural existences (A772=B(800;614). Finally, we return full circle to ens, unum, verum and bonum, which Kant points out in the First Critique as having erroneously been thought to be transcendental predicates of things, when in fact they are nothing more than the logical criteria and requirements for the knowledge of things in general, they refer to the possibiltiy of empirical objects (B114;118). Other examples of transcendental predicates given by Kant are necessity,



infinity, unity, existence outside the world, freedom from the conditions of time and freedom from the conditions of space (A641f=B669f; 531).

Having catalogued the majority of the instances of 'transcendental' in the First Critique, it is possible now to determine the univocity of the term, and then make a few comments regarding the meaning of transcendental for Kant and how the 'Kantian definition' is to be understood as an evolutionary step in the development of the nature of the notion 'transcendental'.

## H. The Univocity of Transcendental in the First Critique

Kemp Smith argues that there are three distinct uses of transcendental discernable in the First Critique. 104 I shall analyse this claim as an heuristic approach for examining the univocity of transcendental in the First Critique. Kemp Smith begins his study of Kant's use of transcendental in the First Critique by observing that

<sup>104</sup> See note 106, above. Kemp Smith is of course not alone in his declaration. Another, more contemporary author - G. R. Kelly (A Study of transcendental Arguments) — has suggested that transcendental has two related yet distinct meanings in the First Critique. She argues that one meaning is in fact what Kant himself called "transcendent", beyond experience (Kelly, p. 193). However, what Kant appears to be saying in the passages in question is not that we are to consider 'transcendental' as going "beyond" experience, but rather as being beyond experience, in much the same way as semantic models are beyond language — both are required for the latter's possibility, yet neither is a part of the latter in any but a constitutive fashion.



in Kant's time the terms transcendent and transcendental, while still remaining synonymous, and though used on the lines of their original Scholastic connotation, had lost all definiteness of meaning and all usefulness of application. Kant took advantage of this situation to distinguish sharply between them, and to impose upon each a meaning suitable to his new Critical teaching. 105

As we have seen in the latter sections of chapter I, the terms transcendent and transcendental had indeed become relatively interchangeable, but in contrast to Kemp Smith's claim above, there was not a corresponding loss of clarity of meaning. Common to all of the influential thinkers immediately preceding Kant is the use of transcendental and transcendent as stressing the *a priori* nature of its subject. 106 There was thus a synonymy between the two terms common to several pre-Critical thinkers, a synonymy broken by Kant. This synonymy however, did not result in an ambiguity of meaning as indicated by Kemp Smith. Rather, part of Kant's contribution was to use transcendental to apply to the *a priori* conditions of knowledge and transcendent as properly applied to that which professed to pass beyond possible experience.

Kemp Smith subsequently writes that transcendental signifies primarily for Kant the science or theory of the a

<sup>105</sup>Kemp Smith, op. cit., p. 75.

modified Scholastic view of transcendental, where a theory which was called transcendental was so described because its subject matter was a priori. Another school of thought used transcendental to signify a theory itself as a priori. Again, a yet third group employed transcendental to indicate the a priori nature of the unity of, and relations between predicates of a particular essence. (See above, pp. 36f)



priori. 107 He also indicates that transcendental philosophy and transcendental knowledge "must therefore be taken as coinciding" 108, and together signify the "science of the possibility, nature, and limits of a priori knowledge. 109 The employment of 'transcendental' as urged by Kemp Smith here flies in the face of all but the most cursory evaluation of Kant's expressed thought in the First Critique. As I have demonstrated, Kant at least primarily understands 'transcendental' as signifying knowledge concerned with the a priori factors which determine the limits, nature and employment of knowledge. 110 It is not a science of the a priori but rather the science of the a priori possibility of knowledge.

The contrast is both pointed out and emphasised by Kant as being fundamental. The term transcendental has something to say about both a priori and a posteriori knowledge. Rather than dealing with the a priori simpliciter, 'transcendental' is concerned with the possibility of knowledge insofar as that knowledge is possible a priori. ('Transcendental' is therefore not concerned with a priori transcendent knowledge, for instance. Nor is it concerned

<sup>107&</sup>quot;'transcendental' is primarily employed by Kant as a name for a certain kind of knowledge. transcendental knowledge is knowledge not of objects, but of the nature and conditions of our a priori cognition of them. In other words, a priori knowledge must not be asserted, simply because it is a priori, to be transcendental; this title applies only to such knowledge as constitutes a theory or science of the a priori." (Ibid. page 74.)
108 Ibid.

<sup>109</sup> Ibid.

<sup>110</sup> See pp. 38ff, above.



with the *a priori* apart from its application to [all] possible experience.) transcendental signifies a portion of the science of the *a priori* — that which is concerned with the possibility and employment of knowledge in general — but contrary to Kemp Smith, Kant makes it very clear that 'transcendental' does not refer simply to the science of the *a priori*. Kemp Smith is in error at least with respect to his claim that 'transcendental' is employed by Kant as dealing with the science of the *a priori*: 'transcendental' is in fact employed by Kant to express the *a priori* nature and possibility of experience.<sup>111</sup>

The imprecision of Kemp Smith's exposition of the primary meaning of the term 'transcendental' for Kant allows one to understand why he postulates a second sense of transcendental in the *First Critique*. Kemp Smith claims a second discernible sense of the term transcendental in the *First Critique*, specifically:

to denote the *a priori* factors in Knowledge. All representations which are *a priori* and yet are applicable to objects are transcendental. $^{112}$ 

Since, however, Kant understood the term transcendental to

<sup>111</sup> What is remarkable here, of course, is Kemp Smith in his translation of the First Critique having Kant say "Not every kind of knowledge a priori should be called transcendental, but only that by which we know that — and how — certain representations (intuitions or concepts) can be employed or are possible purely a priori."(A56=B80;96) and, using this passage as a footnote writing that transcendental knowledge is "a theory or science of the a priori." (Ibid. p.74) How Kemp Smith missed such an obvious paradox is indeed puzzling.

112 Ibid., page 75.



relate to the *a priori* possibility and employment of knowledge, 'transcendental' applies to representations which constitute possible objects. Kemp Smith's distinction is viable, if we accept his position regarding Kant's primary definition of the term transcendental. This distinction is untenable, however, given (1) the innacurracy of Kemp Smith's portrait of Kant's primary employment of 'transcendental', (2) the resemblance of the alledged 'second sense' to what Kant portrays as the only sense of 'transcendental', and (3) Kemp Smith's complete lack of evidence for such a 'second sense'. 113

There is a third sense of the term transcendental attributed to Kant in Kemp Smith's *Commentary*. It is

its extension from the *a priori* intuitions and concepts to the processes and faculties to which they are supposed to be due. Thus Kant speaks of the transcendental syntheses of apprehension, reproduction, and recognition, and of the transcendental faculties of imagination and understanding. 114

Kemp Smith then proceeds to say, without any further argument, and in conclusion, that

inasmuch as processes and faculties can hardly be entitled a priori, Kant has in this third application of the term departed still further from his first definition of it.  $^{115}$ 

providing no argument for the alledged secong employment of transcendental while at the same time providing not a single reference for this supposed second sense he claims to have discovered (pp. 75f).

<sup>114</sup> Ibid., p. 76.

<sup>115</sup> Ibid.



This is a more substantial, if unsubstantiated, claim than the previous one. Is it, however, accurate? The truth of Kemp Smith's claim here rests on the assumption that faculties and processes are not, for Kant, a priori. There is, moreover, a second unstated assumption that 'transcendental' can not be attributed to faculties and processes in a manner consonant with both its defined meaning and its application elsewhere in the First Critque.

Kant equates faculty with a capacity or source (A95;127). Shortly afterwards, he writes that the transcendental faculty of imagination is the ability or capacity to combine or synthesize the manifold of intuition according to the categories. The ability to combine the manifold rests on a priori principles, and these principles constitute the transcendental faculty of imagination (A102;133). Pure imagination, when it is considered as conditioning experience by connecting the manifold of an intuition with the transcendental unity of apperception, is a transcendenfaculty (A124;146). Recalling that Kant understands "faculty" as "capacity" or "source" such passages as these become somewhat more transparent. Thus the possibility of experience requires the capacity for connecting the manifold of intuition in a single unity - there is no structure to be empirically discovered here, as Kemp Smith's remarks would seem to imply.

Kemp Smith refers to talk of transcendental processes as phrases where transcendental declines from its primary



meaning, since processes cannot be a priori. As I have shown above (p.47) however, transcendental synthesis is not an actual act but rather the epistemological requirement that if experience is to be possible, the manifold of intuition must be capable (have the power or capacity) of combining in a single unity (through the unity of apperception). This is a priori in that the capacity of the imagination is a necessary precondition or ground for all experience. The processes of apprehension, reproduction, and recognition may be either empirical or transcendental. The distinction is both evident and easily made, giving one to wonder why such an obvious distinction was not noticed in Kant by Kemp Smith. Kemp Smith misrepresents Kant when he states that faculties and processes cannot be a priori, and therefore transcendental. Kant uses the term 'transcendental' to refer to the a priori capacity or power which is necessary for possible experience, as opposed to its empirical manifestation which is represented through experience.

Kemp Smith appears to be in error when he attributes more than one sense to the term transcendental in Kant's First Critique, since insofar as we consider Kemp Smith's claims, they are unsupported by the contents of the First Critique. Given the exegesis contained in the earlier sections of this chapter, an examination of Kemp Smith's claim that Kant intended more than one type of employment or connotation of transcendental does not stand up. We may then firmly state that in the First Critique Kant uses



transcendental univocally: it signifies the *a priori* possibility of knowledge and its *a priori* employment.

#### I. The Evolution Of Transcendental Through Kant

Does Kant's use of 'transcendental' depart significantly from that of the tradition, *i.e.*, enough to suggest that his use of the term transcendental is "revolutionary"? As Ignacio Angelleli points out, the common practice is to divide 'transcendental' into two senses, one that was used by the Scholastics and a second introduced by Kant. 116 However, neither the comments made by Kant in the First Critique nor an examination of the change in the sense of 'transcendental' from Plato through Kant supports such a view. In fact, if (as has been done in the previous pages of this work) one traces the development of the property which came to be called transcendental from Plato through Kant, what one observes is a steady evolution in the definition and application of the term.

I have demonstrated that from Plato through to Kant's immediate philosophical predecessors there was an evolution in the understanding of those properties which Plato termed "all pervading, connecting terms of discourse" Plato's recognition that there were certain concepts applicable to all types of knowledge is clearly echoed in Tetens' suggestion that there are certain principles common

<sup>116</sup> Ignacio Angelleli, op. cit., p. 117.



to all types of thinking. 117 If one pays attention to those thinkers immediately prior to Kant in Germany, the actual transition from the Scholastic sense of the term transcendental to that of Kant is highlighted. 118 Yet this transition does not allow us to suggest that the sense of 'transcendental' to be found in Kant is one unrelated to that of the Scholastics.

In fact, Kant himself made this point early in the First Critique. In the section (B113-116;118f) quoted above 33ff) Kant aligned himself with the entire tradition. Although he pointed out that the ancients incorrectly interpreted the Transcendentals as being predicates of things rather than the logical requirements of our knowledge of things, he also wrote that the error was due to mistaking the rule of the understanding for a proposition about things themselves. Does this amount to a difference in the sense of the concept transcendental between Kant and the tradition? Clearly there is a different sense discernable between Kant and the tradition, but this did not in Kant's mind seem to be a difference other than that between a proposition and the ground for it. To minimize that difference would be to take away from Kant his originality and genius. To suggest, that there are two unrelated and distinct senses to the term transcendental, the one Kantian and the other Scholastic or traditional, is to neglect the fact that Kant's use of

<sup>&</sup>lt;sup>117</sup> See above, pp. 25ff.

<sup>118</sup>See above, pp. 33ff.



transcendental is dependent on and draws from that tradition. It is not so much that Kant's sense of 'transcendental' is different from that of the tradition but rather that his sense is a culmanation of that tradition; an expected step in the development of the concept of the Transcendentals that began with the ancient Greeks.



### III. TRANSCENDENTAL AND CONTEMPORARY THOUGHT

#### A. The Historical Place of "Transcendental"

The term 'transcendental', as has been shown, underwent an evolution of refinement culminating in the First Critique. Kant's understanding and formulation of the concept transcendental is only a breathing space for the ever-changing formulation of the term's meaning and use. Shortly afterwards there appears a division in the application of the concept which roughly coincided with the division after Kant of philosophy into the so-called analytic and continental traditions. 119 In contemporary analytic discussions, the notion 'transcendental' is usually brought up with reference to the conditions of knowledge, in particular the preconditions for the formulation of concepts.

In this chapter I shall be examining a number of recent articles about the notion of transcendental and comparing how these contemporary thinkers understand the concept with that of the tradition to Kant. In particular, I will be

analytic treatment of 'transcendental', but for a picture of the continental development of the term, one may examine the works of Fichte, Schelling, Hegel, Kierkegaard, Husserl or Heideggar. For a general treatment of these figures, I refer the reader to such works as Copleston, A History of Philosophy, Volumes VII and IX as well as Frank Thilly, A History of Philosophy, especially pp. 431ff. In addition there exists an excellent article by Edward Brennan ("The Latent Potential of the Notion of transcendental") which deals with 'transcendental' as understood by Kierkegaard, Husserl and Heideggar.



arguing that the present understanding of the idea 'trans-cendental' has lost the richness inherent in both Kant's formulation and to a lesser extent that of his predessors.

In comparing contemporary views with historical positions, it is often wise to try to ascertain what the contemporaries in question think of that historical position. One person who has done such a 'survey' will serve as a useful beginning. G. R. Kelly's dissertation, A Study of transcendental Arguments, begins by examing the useful historical example of what is considered to be a transcendental argument: the transcendental Deduction of the Categories in the First Critique. 120 Kelly observes that in Kant where we are presented with what we would be inclined to call a transcendental argument, what we see is an argument concerned with "conditions of experience generally". 121 Kelly argues that one aspect of the transcendental form of argumentation in Kant's works is that of presupposition, 122 suggesting that 'transcendental' was used by Kant to refer to the non-empirical presuppositions that make both a priori and a posteriori knowledge possible. 123

 $<sup>^{120}\</sup>mathrm{Gertrude}$  Rose Kelly , A Study of transcendental Arguments.

<sup>&</sup>lt;sup>121</sup>*Ibid*, p.4. <sup>122</sup>*Ibid*, pp. 5f.

that for Kelly 'transcendental' is used by Kant to imply in part some sense of the non-empirical (p. 195). Perhaps it is this aspect of the use of 'transcendental' which allows her to mistakingly suggest that there is more than one sense to the term (see footnote 109, above).



Moltke Gram, in "transcendental Arguments", suggests that Kant's Refutation of Idealism is a transcendental argument. Page 4 Gram argues here that Kant's criterion, given at A737=B765, is that a transcendental argument is an argument from presupposition. Page 5 In fact, Kant says precisely the opposite: he writes that concepts of the understanding can never be known a priori, but rather they become apodeictically certain upon the presupposition of possible experience (A737=B765). In another article Gram makes a further claim, that "Kant's theory of transcendental arguments does not permit him to distinguish a proposition containing a primitive concept from an analytic proposition." Page 5 Page 5 Page 6 Page

There are two problems with this aspect of Gram's understanding of Kant. One not so serious difficulty is that it is unclear whether Kant (at least in the First Critique) has a "theory of transcendental arguments". In fact, there is only a brief mention of the phrase in the Critique, and the substance of it is that such an argument rests on the inner insufficency of the contingent (A589=B618). To suggest that this single statement summarizes an explicit theory of transcendental arguments strikes me as being something less than an example of unassailable scholarship. A second, more

<sup>124</sup>Moltke Gram "transcendental Arguments".

<sup>125</sup> Ibid, pg 15. 126 **Gram, Moltke S.**, "Categories and transcendental Arguments.", pg 256. On page 255 Gram defines a primitive concept for Kant as a concept which makes experience in general possible.



serious difficulty with Gram's presentation of Kant in this regard is his suggestion that Kant's theory (or statement about) transcendental arguments does not permit distinguish between a proposition containing 'primitive concepts' and analytic propositions. Given Gram's a 'primitive concept', and understanding of understanding of a transcendental argument, we may safely say that a transcendental argument establishes the primitive concept by proceeding from the inner insufficency of the contingent, of possible experience. This primitive concept, resting on the presupposition of possible experience, is radically different from an analytic proposition, for the latter is independent of any possible experience, indeed it is questionable whether any possible experience is in an epistemological position to refute it.

Phillip Griffiths has argued that transcendental arguments, as characterized by himself, are useful only as "dialectical moves in justifying the acceptance of principles." 127 Griffiths begins his article by suggesting that Kant's transcendental Deduction is a form of a more general argument type. 128 This larger, more general form is what he terms a transcendental argument, which he characterizes "as one to the conclusion that the truth of some principle is necessary to the successful employment of

Phillip A. Griffiths, "transcendental Arguments". p.

<sup>&</sup>lt;sup>128</sup> *Ibid*, pp 165f.



a specified sphere of discourse." 129 Although this might what Griffiths is willing to call a transcendental argument the concept of linguistic presupposition inherent in explication is not immediately relatable to Kant's transcendental argument. In fact, the linguistic turn given by Griffiths would be utterly foreign to the intent of the First Critique. More importantly, as I have argued in previous chapter, Kant was very concerned with the justification of epistemological principles, a fact that appears to have been overlooked by Griffiths.

Martin Kalin argues that a formal analysis of transcenarguments is misguided. 130 He writes that Kant's criterion for a transcendental argument is that "it demonstrates a presupposition, or a statement whose truth is necessary for the sense of its premises - including even its which it follows." 131 These own negation from presuppositions are Kant's transcendental principles. 132

Kalin observes, transcendental principles for Kant are presupposed, but can not be known as apodeictically certain without also presupposing possible experience. 133 As th transcendental Dialectic arques in (A299ff=B355ff:301ff) principles are instances of universal a priori knowledge relative to the cases subsumed under

<sup>129</sup> *Ibid*, page 169. 130 Kalin, Martin G., "A Study of transcendental Arguments.", p. 182.

<sup>131</sup> *Ibid*, page 174.

<sup>132</sup> *Ibid*, page 173. 133 Ibid., pp. 173ff (Kalin is here referring to A737=B765).



them. Thus, when principles are employed with respect to experience in general (when the principles in question are instances of universal a priori knowledge with respect to possible experience), they become transcendental principles.

134 But what we must observe here is that the presupposition is logical — not conceptual or linguistic. Both Kant and Kalin are arguing that a transcendental argument shows how, given the presupposition of possible experience, transcendental principles are epistemologically necessary if we are to be able to put form to that experience. It is only on the presupposition of both the principles of reason and possible experience that knowledge can be logically accounted for.

To contend that a transcendental argument for Kant was not, nor could be, used to prove a conceptual or linguistic presupposition <sup>135</sup>is not to suggest that Kant did not make use of a special form of argumentation designed to demonstrate certain logical presuppositions about or aspects of our experience of the world. In fact, there is much to say for the opposite. William Bossart writes that there is such a thing in Kant as genuine transcendental knowledge, and that:

<sup>134&</sup>quot;Through concepts of the understanding pure reason does, indeed, establish sure principles, not known directly from concepts alone, but always only indirectly through relation of these concepts to something altogether contingent, namely, possible experience." (A737=B765;592)
135For example, see an article by Stephan Korner "The Impossibility of transcendental Deductions"



In contrast to transcendent knowledge, transcendental knowledge is about how the *a priori* structure of the mind determines in advance the general structure of all objects of possible experience. Such knowledge is transcendental because the structures with which it is concerned are not found in experience alongside sensations. 136

Elsewhere Bossaart argues that a transcendental argument is designed to reveal this *a priori* structure of experience, that given the assumption of experience, we may only explain it through the presupposition of certain concepts or an *a priori* structure added by us to order sensible intuitions and make them the experience of an  $^{\prime}$  I $^{\prime}$ .  $^{137}$ 

expressed transcendental principles as Jaakko epistemological presuppositions. Hintikka has recently described a transcendental argument, used as Kant would have in the First Critique, as establishing presupposition if the presupposition "is an assertion concerning the process of our coming to know the objects of knowledge in question" 138 Kant's concept of transcendental principles were those fundamental axioms that expressed the presupposed a priori structure of experience, given the corollary presupposition of experience. Transcendental knowledge was the knowledge of these principles, and if anything, a transcendental argument revealed or demonstrated these principles as epistemologically fundamental for possible experience.

<sup>136</sup>Bossart, William, "Is Philosophy transcendental?", page 294.

Bossart, William "Kant's transcendental Deduction". See especially pages 384ff.

Hintikka, Jaakko, "transcendental Arguments, Genuine and Spurious", page 277. (Emphasis mine)



## B. Contemporary Anglo-American Uses of Transcendental

Contemporary Anglo-American thought, when it deals with the concept 'transcendental' is unable to offer anything of comparable richness and depth when compared to Kant and his tradition. The type of framework within which the concept transcendental is generally dealt with in recent thought is that of the transcendental argument, and I shall discuss transcendental argumentation as it is presented within three settings. The first is Strawson's *Individuals* and a number of responses to its claims. The second is that of "transcendental Arguments and science", and the third is that of presupposition and implication in a non-scientific setting.

"It is only because the solution is possible that the problem exists. So with all transcendental arguments." 139 P.F.Strawson is here explicitly stating his view that a transcendental argument shows how we may solve certain problems that arise because we employ a certain conceptual scheme, specifically problems whose solution is possible only given that particular conceptual scheme. Strawson is trying to write an essay in 'descriptive metaphysics' 140 where he in part discusses or reveals aspects of our "conceptual scheme", the way we think about things. 141 Mr. Strawson claims that "a condition of our having this conceptual scheme is the unquestioning acceptance of particular-identity in at least some cases of non-continuous

<sup>139</sup>Strawson, P.F., Individuals. page 40.

<sup>140</sup> *Ibid.*, page 9. 141 *Ibid.* pp. 27ff.



observation." 142

Having argued that we employ a spatio-temporal conceptual scheme in talking about things, and that there must be some sort of particular identity acceptance without continuous observation, Strawson asks the question as to whether there is some class of basic particulars upon which our conceptual scheme rests. The answer is bodies. 143 Strawson is suggesting that material bodies being basic to a spatio-temporal conceptual scheme is the conclusion of a transcendental argument. A transcendental argument on this account then becomes a tool for identifying the basic or general features of a conceptual scheme (in this case a spatio-temporal framework). What Strawson seems to be doing, and this is consistent with his stated intention of practicing descriptive metaphysics, is revealing general features or pervasive structures of the particular conceptual scheme we employ.

P.F. Strawson is saying that when you make use of a transcendental argument you begin with a general characterization of the way we speak (or think) about things and from that deduce general features of that way of speaking (or thinking). A mathematical analogue might be that we are given an as yet unaxiomatized arithmetic and, observing the way we manipulate it using empirical

142*Ibid*, page 35.

of particular-identification which we have, it follows that material bodies must be basic particulars." (*Ibid.*, page 40)



generalizations, we employ transcendental arguments to disclose the general features, the axioms. We then (as Strawson does in Individuals) show how the axioms correctly describe the way we employ that particular arithmetic, and that other alternatives are 'parasitic' on it. 144 What the initial two chapters of Individuals does then is reveal the rules by which we employ a particular conceptual scheme. do not record, these pages however, is justification for the employment of these rules. We are shown that material bodies are necessary for spatio-temporal experience, but we are not shown why they are necessary. The a priori structure of experience which in turn justifies the necessity of material bodies for spatio-temporal experience remains unknown.

Kant recognized that to suggest material bodies as necessary for the experience of space is not sufficent to explain why space is necessary for sensible intuition. Where Strawson accepts our employment of space and time, and from these derives the features of that employment Kant presupposes experience in general and deduces its conditions. The first example of this is of course the Transcendental Aesthetic where space and time, as a priori

<sup>144</sup> In fact, the argumentation of pages 40 - 86 may be read as doing just this. In showing the necessity of material bodies for our spatio-temporal scheme Strawson is arguing that the existence of such entities is a necessary axiom for that conceptual scheme. The bulk of chapter II is in fact designed to show that an alternative axiom (that sounds may be the basic particulars for a spatio-temporal conceptual scheme) is unsuitable.



are shown to condition sensible intuition and thus experience. 145 Where Strawson accepts experience of a particular type and enquires as to its composition, Kant presupposes experience and inquires as to its necessary and sufficent conditions and justification. 'Transcendental' for Strawson refers to a fundamental aspect of experience while for Kant it signifies the conditioning of the very possibility of such experience.

Henry Allison suggests that Strawson belongs to the school of Kant-interpretation which stresses the fundamentality of the external world for the possibility of experience. 146 The tone of *Individuals* suggests this, as do various remarks in the *Bounds of Sense*. In the latter work, an essay on the *Critique*, Strawson indicates that he finds Kant's thesis that the understanding fundamentally conditions experience untenable. 147

<sup>145</sup>Critique of Pure Reason, op. cit., A22=B37-B73;67-91. In this section Kant is giving an exposition of space and time as a priori representations. What makes the exposition transcendental is that it explains how such concepts are principles a priori through which possible experience is explained.(A25f=B40f)

<sup>146</sup> Allison, Henry E. "transcendental Idealism and Descriptive Metaphysics". See esp. pp. 217f.

Descriptive Metaphysics", See esp. pp. 217f.

147 The Bounds of Sense, pp. 20ff. Strawson appears to have a great deal of trouble with Kant's rejection of the simple acceptance of appearances as things-in-themselves. Strawson would, it appears, have us make the cognitive contribution to experience secondary to that of intuition, so much so as to give the material world the prime responsibility for delineating experience. (One possible reason for this might be Strawson's belief that Kant's philosophy was one which rejected the reality of a universe independent of our perceptions [ Ibid., page 35]. This is not, of course, an accurate estimate of either what Kant wrote or implied in his writings.) This view of Kant is especially evident in both Strawsons general and detailed remarks in the sections



147 Allison correctly observes that Strawson has misinterpreted Kant on this point however, and he writes that

"Kant's subjectivism or idealism does not involve the meatphysical claim that there "really are" no objects which exist independently of our awareness of them, but rather that since we cannot get outside our representations to compare them with an object, the objective validity of our judgements must be justified in terms immanent to consciousness." 148

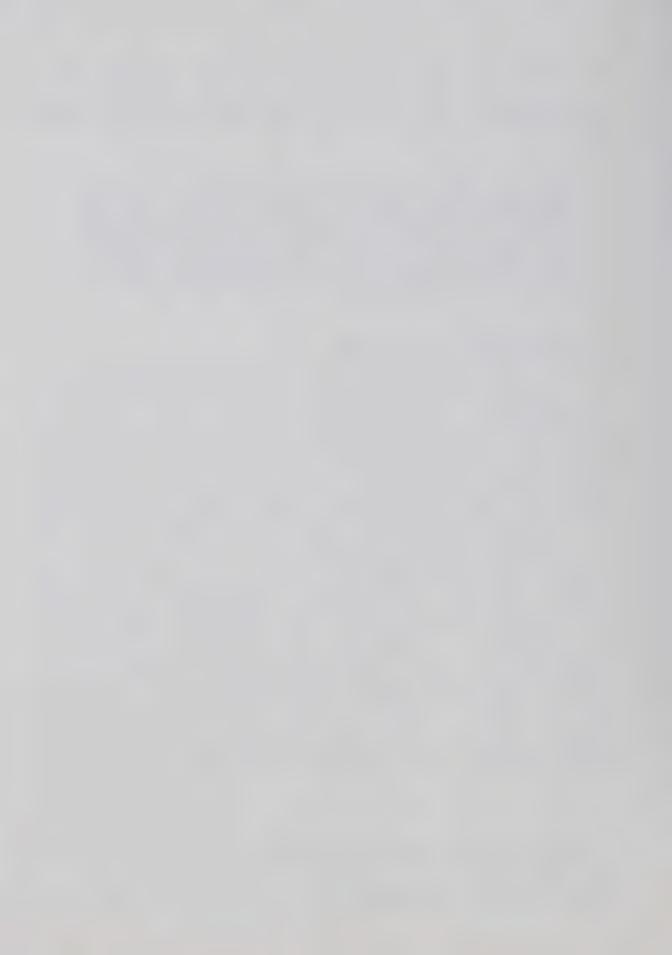
## C. Transcendental and Science

In the Bounds of Sense Strawson frequently addresses vis transcendental Idealism vis a the scientific philosopher. 149 A number of articles have appeared in recent years which try to deal with transcendental arguments insofar as they have a bearing on the practice and structure of contemporary science. What, within the context of science, does 'transcendental' mean - in particular, to analytic philosophers concerned with the those epistemological foundations of science? Contemporary discussions of the status and nature of the foundations of science appear to focus on the notion of 'conceptual scheme', and it is thus this focus that provides a unifying thread through the articles dealing with the concept trans-

<sup>147 (</sup>cont'd)on transcendental Idealism [ *Ibid*, pp. 38 - 42 and 235 - 270].

<sup>148</sup> Allison, op. cit., page 224.

<sup>149</sup> For example, *Ibid*, page 40.



cendental and science which will be examined below. 150

As is well known, Kant was deeply concerned with the establishment of a sure foundation for science, a project with identifiable roots in the Cartesian Philosophy. 151 Something both remarkable yet understandable is the frequent rejection of the Kantian use of the term transcendental by contemporary philosophers. It is remarkable in that 'transcendental' and Kant's program are closely intertwined, in much the same way as Plato and his *Forms* or Husserl and the *epoche*. It is understandable in that the 'transcendental foundationalism' of Kant is clearly not suited to the methods and goals of these contemporary philosophers, who are impressed more by philosophic or scientific 'evolutionism' and pragmatism than by the more 'Psychological' or epistemic analysis of Kant.

Jonathan Bennett represents, in his article "Analytic transcendental Arguments", those who wish to divorce 'transcendental' from Kant. 152 What is interesting about Bennett's article is that he devises what he calls a transcendental argument, which concludes that we cannot have beliefs about our past unless we reasonably regard ourselves as inhabiting

<sup>150</sup> The articles in question were presented at a symposium on transcendental arguments and science in July 1977 and later recorded in a book entitled transcendental Arguments and Science. (Dordrecht: D. Reidel, 1979.) In selecting the articles for discussion from those within this monograph I attempted to be as representative as possible.

151 Compare, for instance, the two Prefaces of the First Critique with the introductory remarks to various works within the Cartesian corpus, such as the Discourse and the

Meditations.

152In transcendental Arguments and Science, op. cit., p. 50.



a world independent of our knowledge of it, a "world in itself". 153 Bennett describes a transcendental argument as one which proves "something about the necessary conditions for self-knowledge, self-consciousness, or the like." 154 As Gunther Patzig points out, there is a great deal to be explained by Bennett when he argues for the existence of an objective world as necessary for self-knowledge. 155 Bennett is unwilling to allow transcendental method the role Kant had given it, and by expicitly rejecting Kant's use, and rather using it as an argument to prove that self-knowledge means the presupposition of an 'objective realm', Bennett has missed the insight of Kant that we can never really prove that there is such a noumenally objective realm. In fact, Bennett seems to have forgotten that this was one Kant's most useful contributions, a point not overlooked by Patzig. 156

As with Bennett, Richard Rorty seems unwilling to divorce transcendental philosophy from realism. Thus he characterizes a transcendental argument as one which presupposes a 'scheme-content' distinction where the content is less well known than the scheme and where the scheme

<sup>&</sup>lt;sup>153</sup>*Ibid*, p. 52.

<sup>154</sup> Ibid, page 50.
155 Patzig, Gunther, "Comment on Bennett" in transcendental Arguments and Science, op. cit.(pp. 71-75), pp. 71f.
156 Consider Patzig's remarks on pp. 71f where he points out that transcendental arguments are specifically designed to limit what we can know without trying to prove the existence of a 'real world', and all of this a priori.



creates the content. 157 A transcendental argument is designed to guarantee the correspondence of logic or language to the world, 158 statements which fly in the face of Kant's program. Where Kant saw knowledge arising from both intuition and pure reason, Rorty is arguing that traditional transcendental arguments, like those of the Deduction of the Categories, are not designed to show this. Rather, he claims, such arguments are 'realist transcendental arguments' which try to show how the scheme understanding) gives rise to the content (intuition) of knowledge and which try to legitimize knowledge by guaranteeing the correspondence of such knowledge to the world in an armchair. 159

Rorty goes on to argue that we must not look to a 'legitimization' of knowledge like Kant's. Rather, we would be better off giving up the notion of 'mapping' our knowledge to the world by correspondence and embracing an evolutionary notion of legitimization. 160 Rorty is clearly incorrect in suggesting that Kant held a correspondence theory of knowledge, and it is odd that he uses 'transcendental' in such an un-Kantian manner. As Carl Wolfgang perceptively writes:

<sup>&</sup>lt;sup>157</sup>Rorty, Richard, "Transcendental Arguments, Self-Reference and Pragmatism" (in *Transcendental Arguments and Science*, pp. 77 - 103), page 79.

<sup>158</sup> Ibid.p. 79. 159 Ibid., pp. 79f. 160 Ibid., p. 92.



"What Kant tries to show is that human knowledge is possible only given certain conditions. If [a transcendental argument] is conclusive what is ruled out is the possibility that there be human knowledge that does not fufill these conditions....To conclude, if one sees Rorty's criticism of transcendental argumentation from this point of view, it will come down to the point that you cannot state necessary conditions for knowledge without presupposing that there is some knowledge. But is this really so damaging?" 161

Rorty raises two concerns regarding the notion 'transcendental': (1) that we must discard Kant's use of the term, for his 'transcendental realist argument' is problematic at best '162; and (2) Kant's use of transcendental suggests a static view of the nature of human knowledge, a view which both lends itself to at best negative argumentation, and does not characterize the way we gain knowledge and the way human knowledge itself changes. Having responded to (1) above, we can go on to respond to (2) by commenting on an article by Jay Rosenberg.

Much like Richard Rorty, Jay Rosenberg suggests that Kant's attempt to approximate knowledge to the world cannot be successful, given his view of the nature of human knowledge. 163 Kant's transcendentalism captured, Rosenberg writes, the truth that we necessarily think of ourselves as representing to ourselves a world that is independent of

<sup>161</sup>Wolfgang, Carl. "Comment on Rorty" (in *Transcendental Arguments and Science*, pp. 105-112), pp. 107f.
162Rorty, op. cit., page 80.

Rosenberg, Jay F., "Transcendental Arguments and Pragmatic Epistemology" (in *Transcendental arguments and Science*, pp. 245 - 262), pg 252.



that representation, 164 and that there must be *some* set of relations or laws that are universal over objects and subjects. 165 Where Kant was wrong was in trying to deduce, a priori, a particular conceptual scheme for human knowledge. This is an erroneous procedure because science evolves, and because it evolves we may not equate any particular conceptual scheme with human knowledge — conceptual schemes are historical, and change as human knowledge evolves. The transcendental inquiry is thus misguided, for it deduces the conditions of a conceptual scheme and shows why alternatives are invalid. Rather, the sought after unity should be methodological and the test of any competing conceptual scheme should be its pragmatic value, 166 the degree to which it brings increasing unity with its conceptualization of the world. 167

Kant's use of the term transcendental implied a priori necessary conditions of experience. Rolf Horstmann has

<sup>164</sup> Ibid., p. 253.

<sup>165</sup> *Ibid.*, page 260.

<sup>166</sup> Ibid., p. 258.

predictive power, testability and coherence. The point Rosenberg is trying to stress is that a conceptual scheme is no better than the use we can make of it in explaining our world. Like Rorty, the question of theoretical correctness never enters, since it is an empty notion. Those like Rorty and Rosenberg accept the reality of an external world. What they seem to be arguing is that the only test the scientific philosopher has of a theory is not its correspondence to the world, but rather its predictive power, coherence, testability and unifying power. When these are greater in one conceptual scheme which is competing with a presently accepted one, we must change our conceptual scheme. This does not mean that the one we have discarded is 'wrong' or 'false'. Rather it is "less powerful'.



pointed out that one of Kant's contributions to the philosophical foundations of science is not a particular conceptual scheme, but rather the necessity of having a conceptual scheme for the possibility of human knowledge. 168 Thus if we are concerned with a methodological unity in science, rather than unity of content, Kant's transcendental approach is still viable as he was only pointing out the necessary conditions any conceptual scheme must satisfy if it is to be successfully employed by us.

But the tension between a Kantian transcendental account of scientific knowledge and the pragmatic evolutionism promoted by people like Rorty and Rosenberg is not yet settled. Apparently Rorty and Rosenberg are advocating a pragmatic evolutionism with respect to particular conceptual schemes (Ptolemy-Copernicus-Einstein ) rather than for all conceptual schemes, or the basic requirements for any conceptual scheme. On their account of the development of alternative theories we are able to use some criteria which are 'transcendental'; criteria which apply across the universe of possible alternative conceptual

the right to use a particular conceptual scheme on account of its synthetic power; but the claim that we need a particular conceptual scheme for the purpose of knowledge because we cannot achieve synthesis without it because of our particular nature, i.e. being apperceptive, discursive intelligences.....The procedure of Kant's consideration of this point could be described as follows: a conceptual scheme can only be justified, if it is correct. It is correct, if its employment allows for an adequate knowledge of the world. "Horstmann, Rolf P. "Conceptual Schemes, Justification and Consistency" (in *Transcendental Arguments and Science*, pp. 263 - 269), page 265.



schemes. They do not seem to advocate the same pragmatic approach with respect to these criteria (such as power, testability, predictiveness and synthesis) but pragmatic approach uses these criteria with respect to conceptual schemes. Kant emphasised the need for a characterization of human knowledge; his First Critique was designed to spell out the a priori structure of human experience. In doing so, he did not endeavour to set up all of the sciences, but rather to provide principles sciences must use. His concern in limiting the sphere of human knowledge was not, as Rorty and Rosenberg seem to imply, the limiting of knowledge to Newton's universe. The continuity of Rorty and Rosenberg's own criteria depend on Kant described as principles of pure understanding. Seen in this light it is clear why criteria such as 'predictiveness' are meaningful applied across (competing) conceptual schemes. Kant attempted to explain the nature and genesis of experience in general. The success of this investigation subsequently allows us to ask questions regarding the nature and genesis of particular theories. The failure or sucess in the latter endeavour should not misconstrued as success or failure in the former. This is, I think, the error of Rorty and Rosenberg.

The distinction between the status of any particular conceptual scheme and the 'transcendentality' of Kant's inquiry can be further resolved through observations on the conceptual foundations of science. One approach, most



amiable it would appear to pragmatists, is to suggest that in fact rationalism and empiricism each have something to offer to the scientific endeavour. On this account of science, we have two 'sides' to each question: the 'fact' of the singular and the 'structure' or 'theory' of the general.

This approach claims that we use objects, or particular observations, to justify propositions of a theory and that the theory in turn defines the nature and constitution of particulars. The content and scheme, or particular observations and the theoretical framework they are made in, are symbiotic — the theory being primary. An object is then defined by its role in a theory and in research we examine the interrelationship of the two. 170

The problem with this approach — the separation of theory and object — is that it flies in the face of the very sensible position held by Kant. Kant continually pointed out in the *First Crtique* that we could not reasonably hope to clearly separate theory and object; reason and sensibility.

171

<sup>169</sup> I am drawing here on the stated view of **Kuno Lorenz** in "The Concept of Science. Some Remarks on the Methodological Issue 'Construction' Versus 'Description' in the Philosophy of Science" (in *Transcendental Arguments and Science*, pp. 177 - 190), esp. page 182.

<sup>170</sup> Ibid., pp. 185ff.
171I am referring here to two comments by Lorenz in the above mentioned article. At one point he writes: "For, if extendability fails, we are stuck in conceptual frames without prospects to satisfy them; and if presuppositions serve as substitutes for explicit introductions, there is no chance to guarantee anything beyond the perceptual cores." (p. 186) Lorenz appears to think that this separation of thought and intuition is meaningful, for he goes on immediately to say that this is a modernized statement "of



<sup>171</sup> If we could separate theory and object, then we would in fact be faced by the same dilemma that confronted philosophers like Hume.

An alternative to this approach is the suggestion that our knowledge of the world, rather than arising from the separate spheres of theory and content, is 'imposed' on us by the world. 172 Kant was aware of our intellectual nature being in part a product of our physical constitution, yet he refused to carry this observation to the point of pure epiphenomenalism. He was unwilling to suggest that human knowledge was a simple product of physical laws. If one embraces this point of view however, the laws of physics become the preconditions for human experience, and therefore the necessary conditions for science and scientific knowledge. Such a theory of experience allows for an unlearnt aspect of human knowledge, helping, it seems, to explain the harmony of pure understanding and intuition found in Kant's pure imagination (both springing from the same source, the fundamental laws of physics). 173

<sup>171 (</sup>cont'd) Kant's famous dictum that concepts without intuitions are empty and intuitions without concepts are blind." In fact, Kant stresses the interrelationship of concepts and intuitions rather than their independent importance. See also Rudiger Bubner, "Transcendentals and Protoscience" (in Transcendental Arguments and Science, pp. 191-195), for similar comments on Lorenz.

172A position advocated by Rosenberg (op. cit.), for

example.

173 For an excellent presentation of this position, I refer the reader to C. F. Von Weizsacker "The Preconditions of Experience and the Unity of Physics" (in Transcendental Arguments and Science, pp. 123 - 158)



This view of experience does not observe that in trying validate the principles of physics as a priori valid preconditions for scientific knowledge there is a tacit assumption that these principles of physics can be known as a priori valid. Kant's contribution to the study of scientific foundations can be seen in part by his observation that experience is phenomenal and that the universe as it is in itself, and its laws as they apply to things in themselves are not in principle knowable by us. When even the laws of physics are part of the human experience they are formed through the interaction of reason and intuition. To adopt an epistemology of realism, which would have us discover the basic principles of quantum theory and general relativity and then to suggest that these principles are preconditions of experience may refinement of Locke's and Hume's positions. But such a theory only falls prey to the same, albeit refined, dilemma that Locke and Hume faced and were unable to overcome. As Kant observed, we cannot honestly say that we observe the 'real' principles of physics, since we have no means of independently verifying such a claim. We can never be sure subjective factor is either eliminated or transparent. We are left with the same problem that Kant recognized as insoluble, because it rises from the very nature of human knowledge.

Kant's use of the concept transcendental appears to have been missed by contemporary philosophers of science.



The preoccupation evidenced by such thinkers with science in its present form, or with what they take to be its historical faults, results in a common failure to see Kant's conception of transcendental as I have descibed it above. They have, as a result, fallen into precisely those traps Kant avoided through his use of the concept transcendental. The conflation of a particular conceptual scheme accepted by Kant with his more general and predominant remarks to the effect that we need a conceptual scheme for experience is a mistake too frequently made by contemporary philosophers of science, similar to the conflation of phenomenal laws and noumenal principles.

## D. Transcendental, Presupposition and Implication

In a less explicitly scientific context, the idea 'transcendental' seems to be tied in some way to the notions of presupposition and implication in the minds of many contemporary thinkers. This is most evident in the area of linguistic philosophy, be it logically, epistemically or metaphysically motivated. To highlight the distinction between Kant's and his tradition's use of transcendental, and that of the notion of linguistic presupposition or implication common today, will take but a brief space, sufficent only to clearly indicate the distinction. 174

<sup>174</sup> There is no dearth of literature on the subject of presupposition, but in addition to the articles I shall refer to below, there are a number of excellent monographs and articles, among them Hintikka, Jaakko, Models for Modalities, Kempson, R., Presupposition and the Delimitation



Much of contemporary thought on presupposition centers on the conditions or structure of our use of language. As with *Individuals*, it is common to begin with a statement to the effect "We use language in such-and-such a way." Language, or rather the language and its rules, are givens and we seek to describe the conditions of its use and structure, trying to give at least a semi-formal statement about the way it functions. We attempt to formalize language into syntactic and semantic components. By doing so, we seek to uncover the way language functions, to describe its genesis. Within such a context we may identify, in general, types of presupposition and implication, the semantic and syntactic, or a combination of the two. Through the study of the semantic and syntactic components of language we aim to identify the presuppositional nature of language.

One might venture to say that in general the proper use of language presupposes some things, and is presupposed by others. 175 Strawson's use of a transcendental argument can be understood as uncovering this kind of linguistic presupposition by showing how one concept (that of material bodies as basic particulars) is fundamental to an accepted

<sup>174(</sup>cont'd) of Semantics, Filmore and Langondoen (ed), Studies in Linguistic Semantics, Sellars, W.
"Presupposing" (in Philosphical Review, 1954, pp. 197 - 205), and Schnitzer, "Presupposition, Entailment, and Russell's Theory of Descriptions" (in Foundations of Language, 1971, pp. 297 - 299).

<sup>175</sup> For instance, *Individuals* suggests that our own linguistic intelligibility presupposes the existence of material bodies(For an example of this, see pp. 198ff).



use of language (a particular conceptual scheme) and how others are parasitic. 176 Those who reject the notion of those transcendental arguments whose purpose is to uncover such presuppositions do not reject them because they fail to do so, but rather because the conclusions either cannot be empirically refuted or because they lack factual content. 177 Such diverse people as Strawson, Rorty and Korner see the function of a transcendental argument as uncovering the basic presuppositions of language.

Where agreement seems to appear is in the area of the deductive invalidity of transcendental arguments which purport to uncover these linguistic presuppositions. What transcendental arguments do is explore the structural aspects of language, but in doing so they make use of a priori relations among the premises. We may suggest that there is a subclass of transcendental arguments which, although deductively invalid, may be considered 'valid' in another, non-deductive sense, such as that of material sufficiency. 178 An alternative way of characterizing transcendental arguments of this sort is by arguing that if the transcendental argument is successful, it discloses the subclass of properties of objects which are the object's presuppositions. Such presuppositions may take the form

<sup>176</sup> See, for instance, Rorty's comments on Strawson (Rorty, R., "Verificationism and Transcendental Arguments").
177 See, for instance, Korner, S. "Transcendental Tendencies in Recent Philosophy"
178 See, for instance, Wilkerson, T.E., "Transcendental Arguments", especially pp. 208 - 213.



"this entity has such-and-such properties" or the syntactic and semantic presuppositions that govern the use of language. 179

In asking questions about linguistic presuppositions we are asking fundamental questions about language, how it is structured, is used, and its rules. An argument which is designed to reveal this structure may be in some priori, but to call it transcendental is misleading: misleading in a way similar to that of calling the argument of Chapter II of *Individuals* transcendental. Presupposition, as a fundamental aspect of language, is not a justification for the phenomenon that is language. We may say that it forms a fundamental aspect of language, that without it our language would be radically different, but this is a very different thing than suggesting that it conditions the possibility of language. The same mistake made by Strawson with respect of a conceptual scheme is made by linquistic philosophers - that of confusing fundamental aspects of the way we speak or think with the preconditions of the very possibility of thinking or speaking at all.

In using transcendental to speak of those minimum yet universal preconditions for experience, for language, Kant did not point to aspects of experience or our linguistic structures. All discussions in the *First Critique* which center on the transcendental aspects of experience

<sup>179</sup> See, for a discussion of this **Harrah**, **Da**vid, "Theses on Presupposition".



emphasize, as we have seen, experience in general in contrast to the discussions by contemporary philosophers like Strawson or the linguists. Where someone like C.K. Grant<sup>180</sup> or Isabel Hungerland<sup>181</sup> asks how language functions and the presuppositions of its functioning in thus-and-such a way, Kant asked the far more fundamental question, "how is language epistemically possible?".

This is not to denigrate the efforts of such people as Grant, Rorty or Bas van Fraassen<sup>182</sup>. But their valuable contributions should not be misconstrued as replacing the groundwork performed by Kant. Rather, they should be understood as building on Kant's work, detailing the application of Kant's general observations to particular situations and problems.

<sup>180</sup> Grant, C. K., "Pragmatic Implication".

<sup>181</sup>Hungerland, Isabel, "Contextual Implication".

<sup>182</sup> I refer here to Van Fraassen's attempt to formalize the notions of presupposition and implication in his article "Presupposition, Implication and Self-Reference".



## IV. Conclusion

Just as the present state of relativistic physics is the product of the evolution of man's desire to understand the world around him, so too must the concept transcendenta! be viewed as the result of centuries of progress in the way seek to explicate our knowledge of the world we we experience. The present controversy over the meaning, indeed over the very meaningfulness, of the concept transcendental bears witness to the fact that we have yet to adequately understand its 'latent potential'. Perhaps it says something more about us, than about the utility of the concept, that we can view 'transcendental' as aiding in illuminating the fundamental problems in contemporary philosophy of science in much the same way as thinkers such as Scotus or Ockham did in their time. Something more about us, in that we seem to turn back, albeit in increasingly sophisticated ways, to the same concepts that philosophers and scientists have employed since the quest for understanding our universe and our experience of it first began.

Perhaps we hesitate to acknowledge our philosophic or scientific predecessors out of the (perhaps just) fear that the ingenuity of our contribution will be lost. In the cases of such diverse persons as Aristotle and P. F. Strawson, when they dealt with the concept transcendental, such indeed appears to be the case. But this reluctance should not blind us to the recognition that their remarks on the concept transcendental are historically preceded by copius thought



and formulations by others. Indeed, much of what they had to say, and what contemporary and future thinkers have and will have to say concerning the concept transcendental would be incomprehensible if it were not for the contributions of their intellectual predecessors. This thesis has in fact argued that our present understanding of the concept transcendental is indeed a product of centuries of ever-evolving answers to fundamental epistemological questions. As we began to more fully appreciate the difficulties associated with explaining how we can know the world we live in, the concept transcendental itself was used with increasing sophistication.

The initial chapter traced the development of the concept transcendental from its original formulation in the philosophies of the ancient Greeks to that of those thinkers who immediately preceded Kant (both historically and intellectually). A brief examination of the formulations of Plato and Aristotle showed that there was an early awareness that the diversity of nature was 'underwritten' with a necessary fundamental unity. This unity was seen by the Syriac and Arab commentators as expressing the unity of both Allah and His creation, a theme which was then borrowed by the Latin Scholars from Roland of Cremona through Aquinas. This unity was expressed in the Latin Scholar's writings by the term "Transcendental", although it evolved from primarily a metaphysical use prior to and including St. Thomas Aquinas to an increasingly epistemological employment



in Scotus, Ockham and Suarez. Beginning with Descartes, there was a shift, culminating in Kant, to use the concept transcendental to describe the way we experience our world rather than to describe the world in terms of relations or characteristics apart from our experience.

The second chapter of this thesis dealt with the concept transcendental as employed by Kant in his First Critique. This chapter catalogued Kant's use of "transcendental" in the First Critique and demonstrated a consistency of use and purpose that has been argued by commentators as lacking. This chapter then proceeded to justify the claim that Kant's use of the concept transcendental must be viewed as an evolutionary step in the development of the concept, rather than a radical departure from the tradition. It does so by demonstrating the historical and philosophic relationships that exist between Kant, his use of the concept transcendental, and that of his historic and philosophic predecessors. The chapter concludes with the observation that although Kant's contribution to the evolution of the concept transcendental is both original and exciting, his employment built upon, rather than departed from, the efforts of his philosophic ancestors.

In the final chapter some indication of the present state of the concept transcendental was made. The chapter presented a number of opposing views on the usefulness of the term, as well as some attempts to utilize what many have called a "Transcendental Argument". One theme that kept

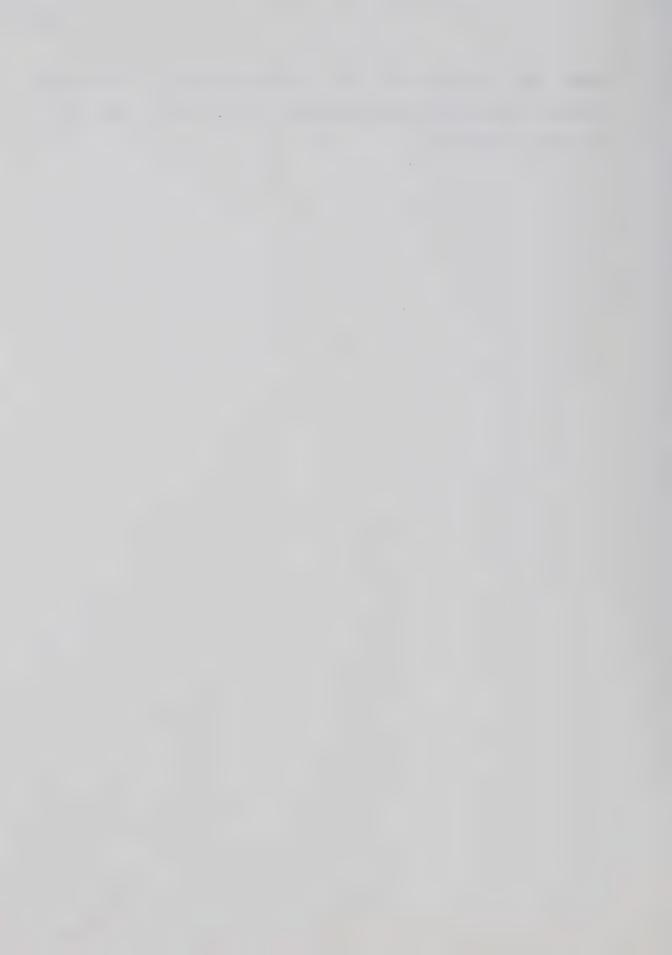


recurring was the discontinuity between Kant's use of the concept transcendental to and the use many contemporary philosophers see the concept transcendental profitably fufilling. Attempts to relate the concept transcendental to the notion of presupposition were shown to be misguided, not because the concept transcendental does not suggest 'presupposition', but rather because the concept transcendental suggests a type of presupposition much more fundamental than that which interests the philosopher of language. It suggests that which is presupposed for the very possibility of experience.

The concept which has evolved over the years, and which we now term 'transcendental', is still evolving. This thesis has not attempted to deal exhaustively with the contemporary analysis of the concept transcendental. Nor has any but the briefest mention been made of what concerns the entire 'Continental' tradition from Kant onwards. Finally, the scope of this thesis has not even suggested any critique of the 'Analytic' and 'Continental' traditions, although such an effort would no doubt bear considerable fruit. What been done, however, was to bring to the reader's mind the awareness that the concept transcendental has a rich history connected to the explication of the way we experience the world we live in, and that its is a concept that has neither outlived its usefulness nor been fully developed. The use to which it is presently put in dealing with foundational questions in the philosophy of science is testimony to the



power and vitality of the "Transcendental". To further explore the concept transcendental will likely not be a fruitless endeavour.



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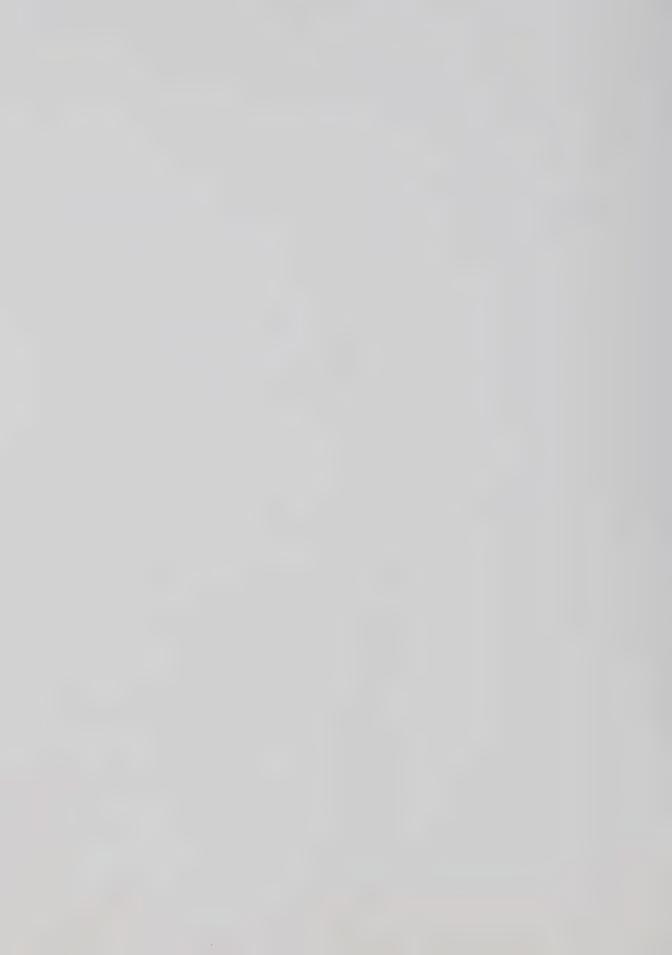
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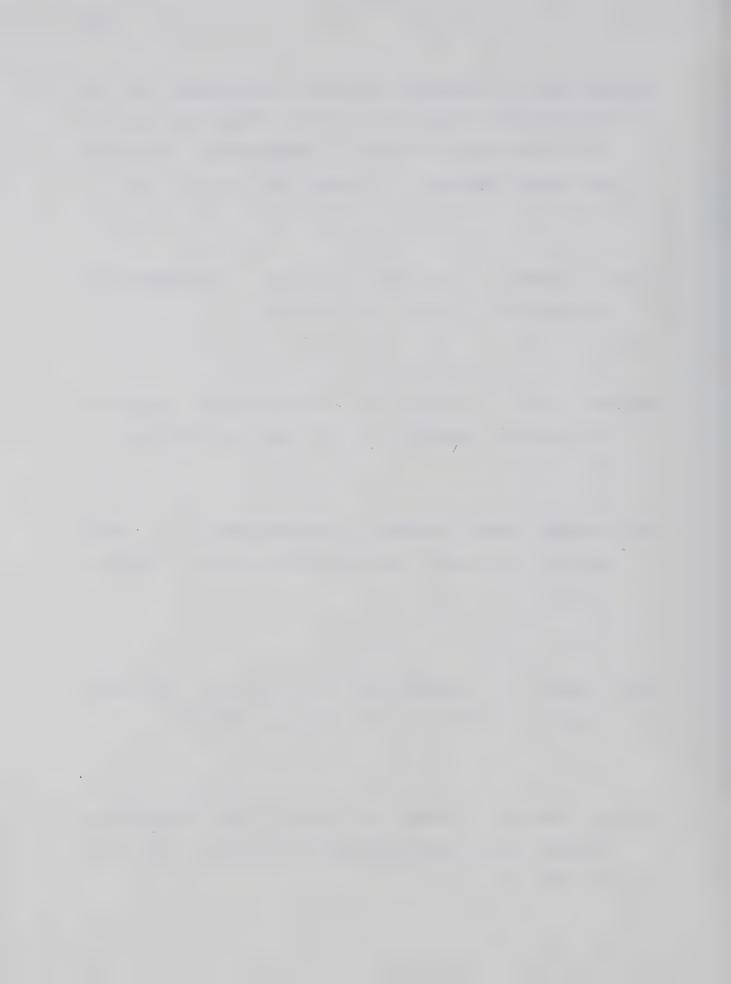
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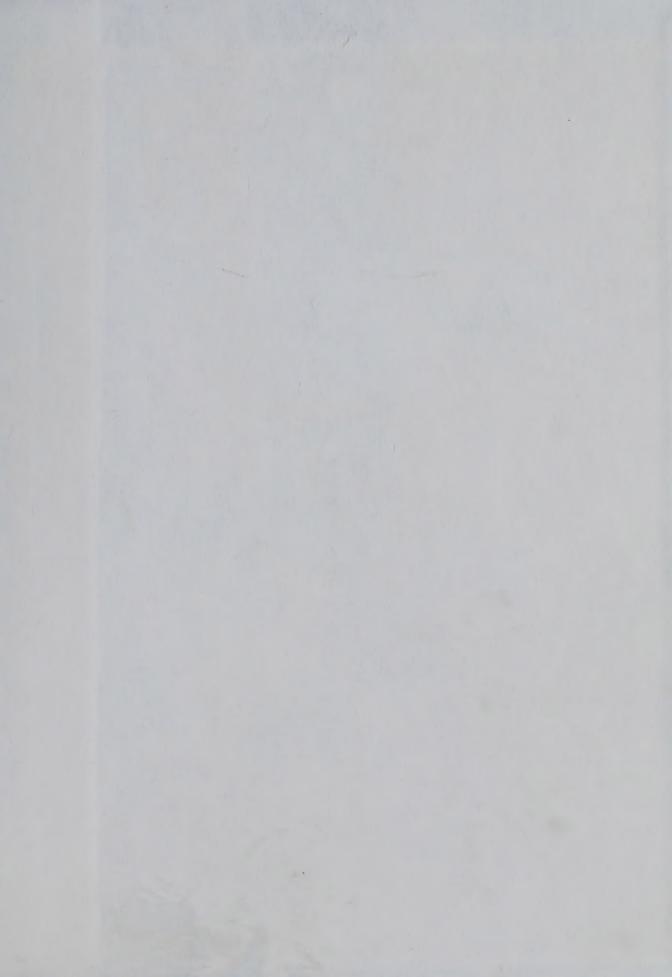
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